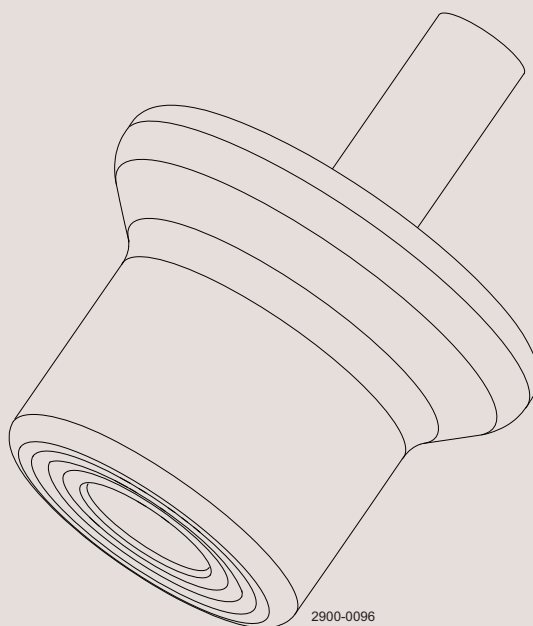




Instruction Manual

Unique Sampling Valve - Accessories - Quick Connection



ESE02427-EN1

2013-04

Original manual

The information herein is correct at the time of issue but may be subject to change without prior notice

1. Safety	4
1.1. Important information	4
1.2. Warning signs	4
1.3. Safety precautions	5
2. Installation	6
2.1. Unpacking/delivery	6
2.2. General installation - standard Quick Connection	6
2.3. General Installation - special Quick Connection	7
2.4. Recycling information	8
3. Operation	9
3.1. Operation - standard Quick Connection	9
3.2. Operation - special Quick Connection	10
3.3. Troubleshooting	10
3.4. Recommended cleaning	11
4. Maintenance	12
4.1. General maintenance	12
5. Product information	13
5.1. Technical data	13
5.2. Product range	14
6. Parts list and service kits	16
6.1. Quick Connection - sizes 4 and 10	16
6.2. Male Quick Connection	18
6.3. Female Quick Connection	20

1 Safety

*Unsafe practices and other important information are emphasised in this manual.
Warnings are emphasised by means of special signs.*

1.1 Important information

Always read the manual before using the Quick Connection!

WARNING

Indicates that special procedures must be followed to avoid serious personal injury.

CAUTION

Indicates that special procedures must be followed to avoid damage to the Quick Connection.

NOTE

Indicates important information to simplify or clarify procedures.

1.2 Warning signs

General warning:



Caustic agents:



All warnings in the manual are summarised on this page.

Pay special attention to the instructions below so that serious personal injury and/or damage to the Quick Connection are avoided.

1.3 Safety precautions

Installation:

Always read the technical data thoroughly. (See chapter 5 Product information)

Always release compressed air after use.

Never touch the moving parts if the actuator is supplied with compressed air.

Never touch the Quick Connection or the pipelines when processing hot liquids or when sterilising.

Never dismantle the Quick Connection under pressure.

Never dismantle the Quick Connection when it is hot.



Operation:

Never dismantle the Quick Connection under pressure.

Never dismantle the Quick Connection when it is hot.

Always read the technical data thoroughly. (See chapter 5 Product information)

Always release compressed air after use.

Never touch the Quick Connection or the pipelines when processing hot liquids or when sterilising.

Never touch the moving parts if the actuator is supplied with compressed air.

Always rinse well with clean water after cleaning.

Always handle lye and acid with great care.



Maintenance:

Always read the technical data thoroughly. (See chapter 5 Product information)

Always release compressed air after use.

Never service the Quick Connection when it is hot.

Never service the Quick Connection with the valve and pipelines under pressure.



Transportation:

Always ensure that all connections are disconnected before attempting to remove the Quick Connection from the installation.

Always drain liquid out of the Quick Connection before transportation.

2 Installation

*This instruction manual is part of the delivery. Study the instructions carefully.
The items refer to the parts list and service kits section.*

2.1 Unpacking/delivery

Step 1

CAUTION

Alfa Laval cannot be held responsible for incorrect unpacking.

Check the delivery for:

1. Quick Connection
2. Instruction manual

Step 2

Remove possible packing materials from the Quick Connection.
Inspect the Quick Connection for visible transport damage.
Avoid damaging the Quick Connection.

2.2 General installation - standard Quick Connection

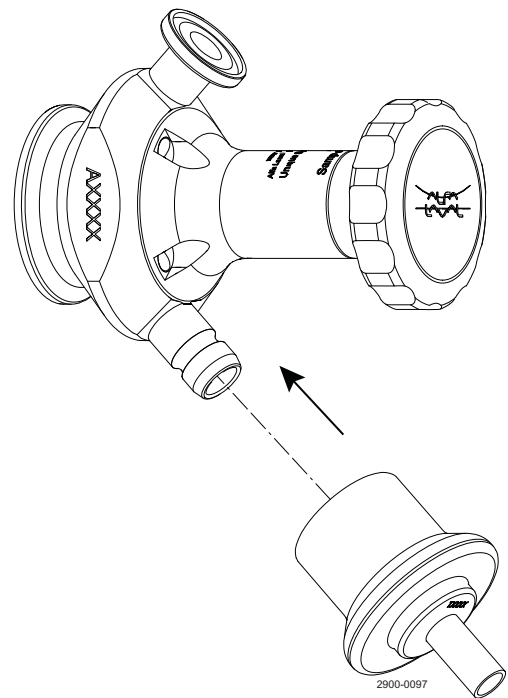
Step 1



Always read the technical data thoroughly.
See chapter 5 Product information

CAUTION

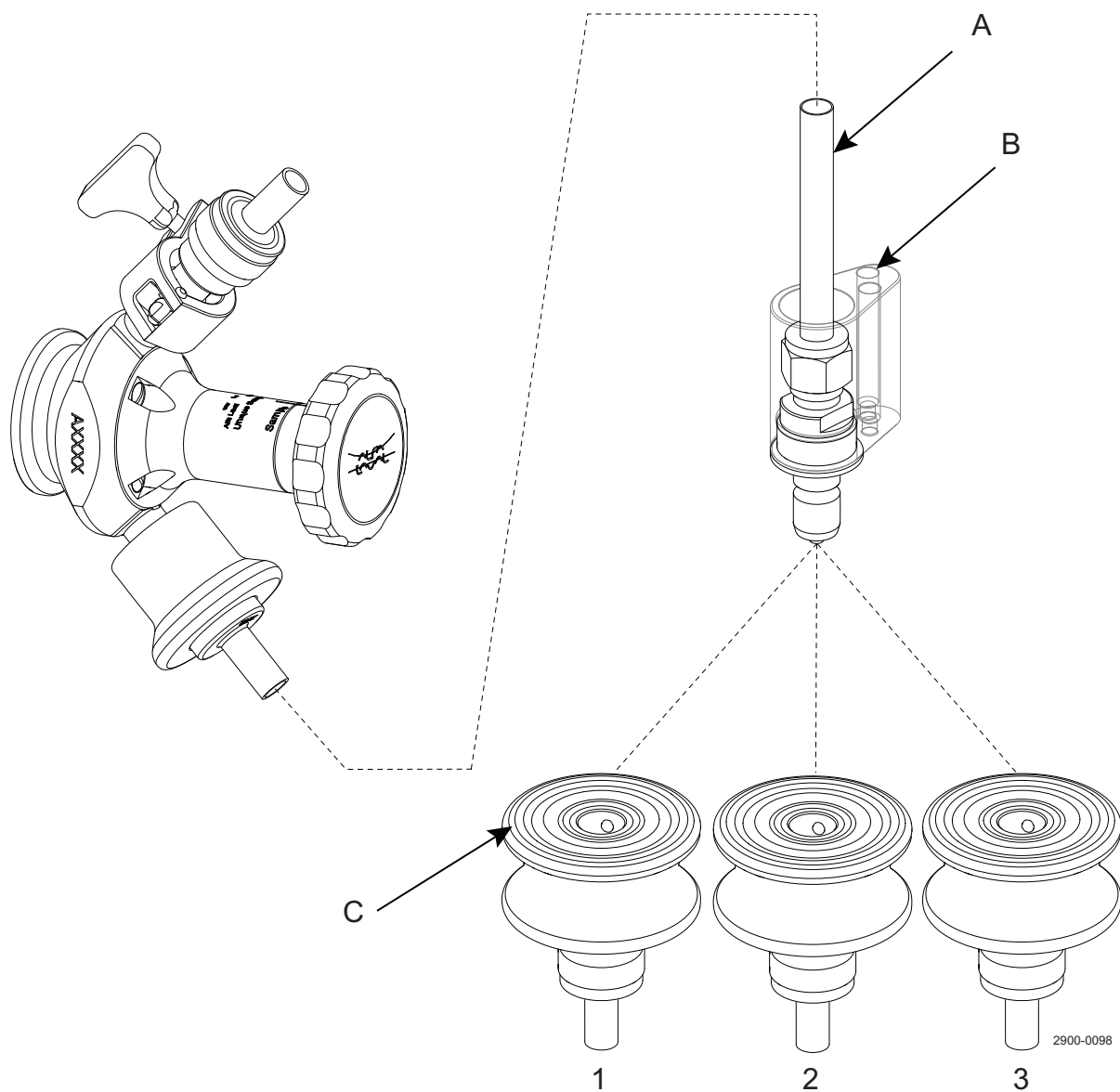
Alfa Laval cannot be held responsible for incorrect installation.
Mount the Quick Connection on the lower connection on the
Sampling Valve.



Study the instructions carefully and pay special attention to the warnings!
The valve has welding ends as standard but can also be supplied with fittings.

2.3 General Installation - special Quick Connection

Quick Connections with Non-Return Valve



A. Pipe (OD = Ø10 mm)

B. Mount holes for proximity switch*

C. Indicator rings for different applications**

* = Proximity switch is not included

** = Indication rings are included

Example of use

1. CIP acid outlet
2. CIP lye outlet
3. CIP water outlet

2 Installation

Study the instructions carefully and pay special attention to the warnings!
The valve has welding ends as standard but can also be supplied with fittings.

2.4 Recycling information

- **Unpacking**

- Packing material consists of wood, plastics, cardboard boxes and in some cases metal straps.
- Wood and cardboard boxes can be reused, recycled or used for energy recovery.
- Plastics should be recycled or burnt at a licensed waste incineration plant.
- Metal straps should be sent for material recycling.

- **Maintenance**

- During maintenance, oil and wearing parts in the machine are replaced.
- All metal parts should be sent for material recycling.
- Worn or defective electronic parts should be sent to a licensed handler for material recycling.
- Oil and all non-metal wearing parts must be dealt with in accordance with local regulations.

- **Scrapping**

- At the end of use, the equipment should be recycled according to the relevant, local regulations. As well as the equipment itself, any hazardous residues from the process liquid must be considered and dealt with in a proper manner. When in doubt, or in the absence of local regulations, please contact your local Alfa Laval sales company.
-

Study the instructions carefully and pay special attention to the warnings!
Ensure that the Quick Connection operates smoothly.
The items refer to the parts list and service kits section.

3.1 Operation - standard Quick Connection

Step 1



Always read the technical data thoroughly.
See chapter 5 Product information

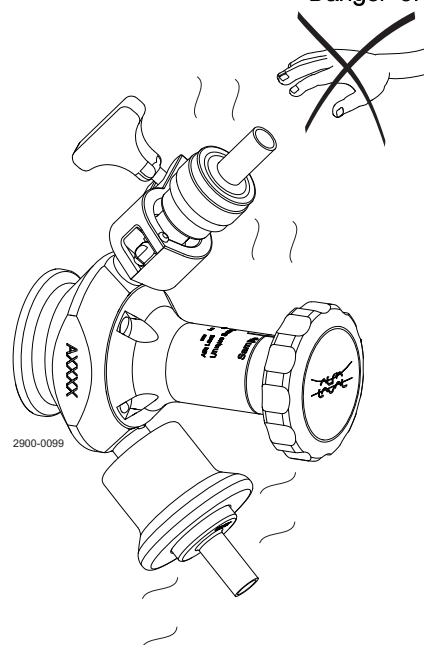
CAUTION

Alfa Laval cannot be held responsible for incorrect operation.



Never touch the Quick Connection or the pipelines when processing hot liquids or when sterilising.
The Quick Connections are used as a connection on the outlet on the Sampling Valve.

Danger of burns!



3 Operation

Study the instructions carefully and pay special attention to the warnings!
Ensure that the Quick Connection operates smoothly.
The items refer to the parts list and service kits section.

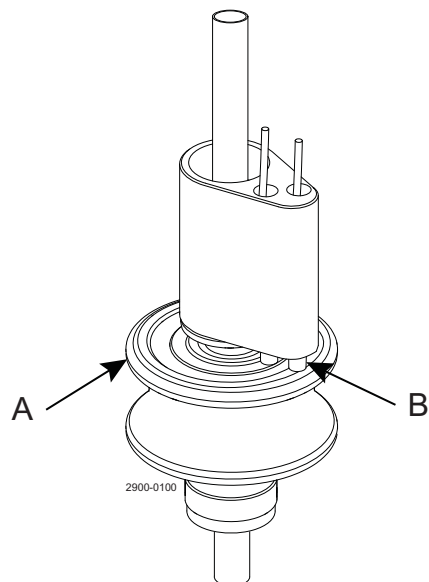
3.2 Operation - special Quick Connection

The male and female Quick Connection with Non-Return Valve, is normally used together.

When the two Quick Connctions are connected together, the integrated Not Return Valves on both will be open.

It is possible to mount up to two proximity switches (not included), which are used for surveillance on the connection.

A = Indication rings
B = Proximity switch



3.3 Troubleshooting

NOTE!

Study the maintenance instructions carefully before replacing worn parts.

Problem	Cause	Repair
Product leakage	O-ring is damaged or worn	Replace o-ring

Study the instructions carefully and pay special attention to the warnings!
Ensure that the Quick Connection operates smoothly.
The items refer to the parts list and service kits section.

3.4 Recommended cleaning

Step 1



Always handle lye and acid with great care.

Caustic danger!



Always use
rubber gloves!



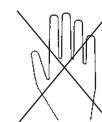
Always use
protective goggles!

Step 2



Never touch the Quick Connection or the pipeline when sterilising.

Danger of burns!



Step 3

Pay special attention to the warnings!

Step 4

Examples of cleaning agents:

Use clean water, free from chlorides.

1. 1% by weight NaOH at 70° C

1 kg NaOH + 100 l water = Cleaning agent.

2.2 l
33% NaOH + 100 l water = Cleaning agent.

2. 0.5% by weight HNO₃ at 70° C

0.7 l
53% HNO₃ + 100 l water = Cleaning agent.

Step 5

1. Avoid excessive concentration of the cleaning agent.
2. Adjust the cleaning flow to the process.
3. **Always** rinse well with clean water after cleaning.

NOTE

The cleaning agents must be stored/disposed of in accordance with current regulations/directives.

Always rinse!



Clean water Cleaning agents

4 Maintenance

Maintain the Quick Connection regularly.

Study the instructions carefully and pay special attention to the warnings!

Check the Quick Connection for smooth operation after service.

4.1 General maintenance

Maintenance	Action
Maintenance after leakage	- Replace o-ring
Planned maintenance	Regular inspection for leakage and smooth operation Keep a record of the Quick Connection Use the statistics for inspection planning Replace after leakage
Lubrication	Klüber Pareliq GTE703 or similar

Recommended spare parts

Service kits (see section 6 Parts list and service kits)

*It is important to observe the technical data during installation, operation and maintenance.
Inform personnel about the technical data.*

5.1 Technical data



Attention!

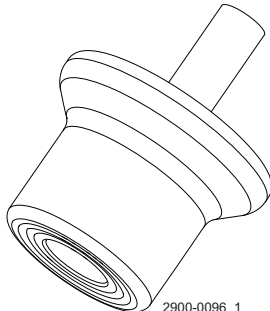
Never touch the Quick Connection or the pipelines when processing hot liquids or when sterilising.

Never service the Quick Connection when it is hot.

Danger of burns!



Technical data	
Max. product pressure	600 kPa (6 bar)
Max. working temperature	130 °C
Materials	
Product wetted steel parts	1.4404 (316L) (internal Ra < 0.8 µm)
Other steel parts	1.4301 (304)
Handle	PA6.6
O-ring	EPDM (3A and FDA)
Spare parts	
Sealing kit	See section 6 Parts list and service kits



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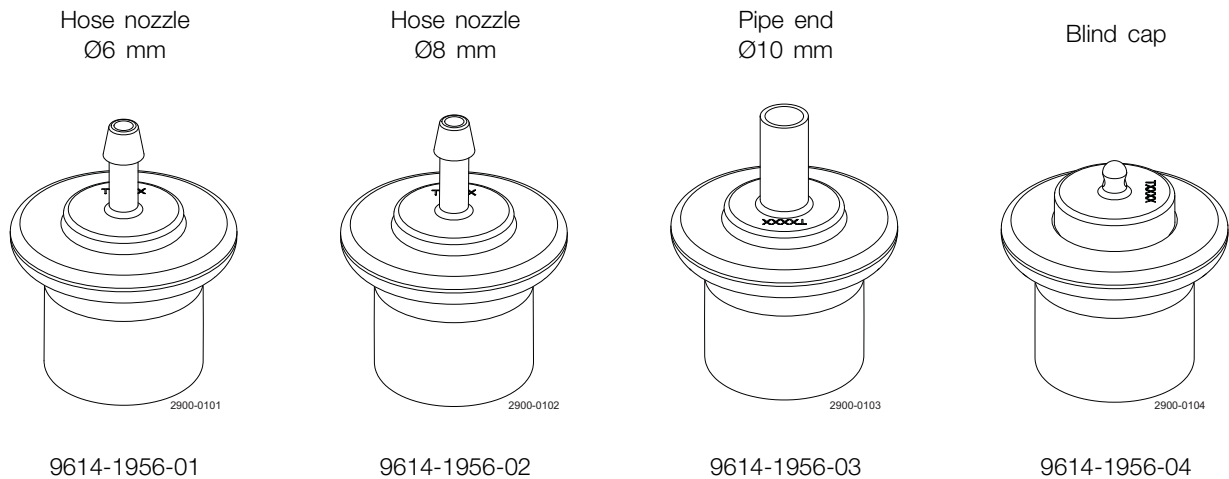
5 Product information

*It is important to observe the technical data during installation, operation and maintenance.
Inform personnel about the technical data.*

5.2 Product range

Standard Quick Connections:

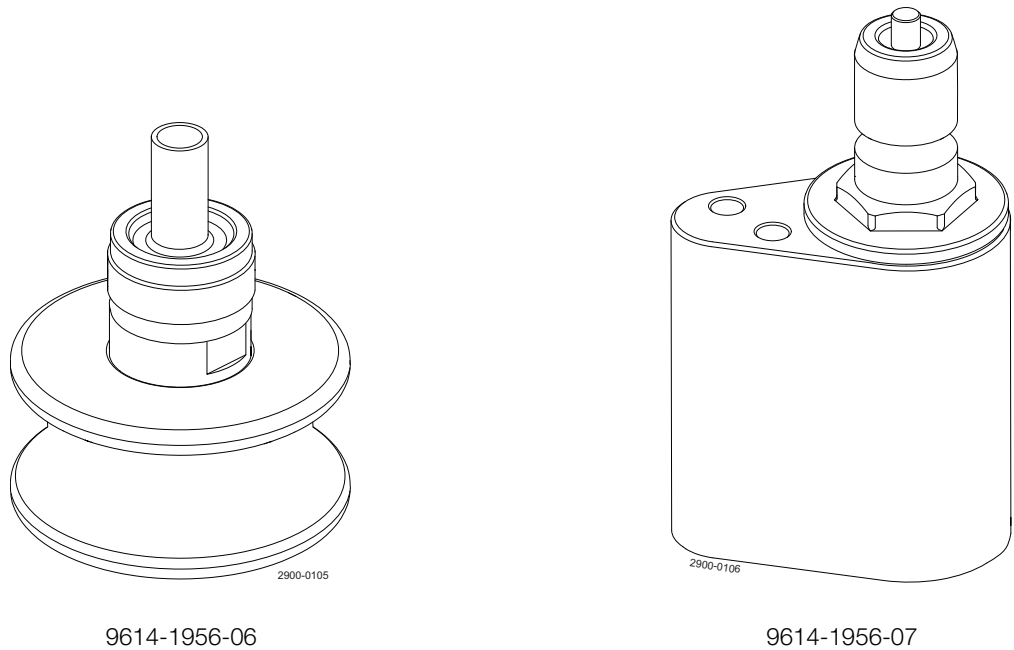
These Quick Connections are compatible with the Unique Sampling Valve sizes 4 and 10.



Special Quick Connections:

Female Quick Connect with Non-Return Valve

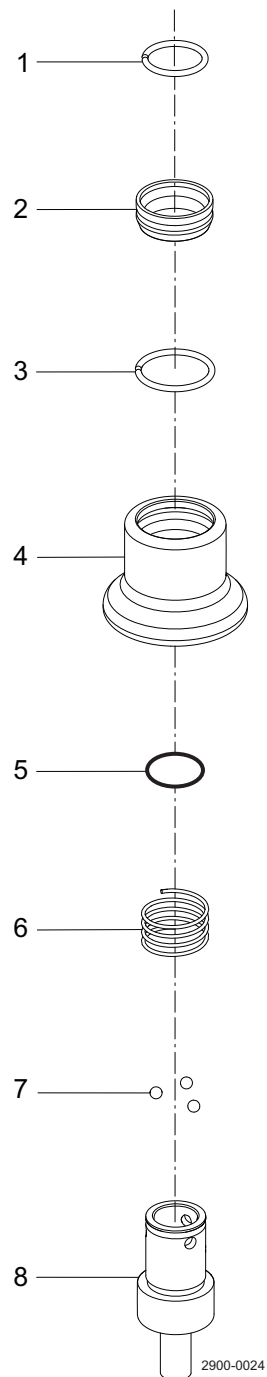
Male Quick Connect with Non-Return Valve



6 Parts list and service kits

Study the instructions carefully and pay special attention to the warnings!

6.1 Quick Connection - sizes 4 and 10



6 Parts list and service kits

Study the instructions carefully and pay special attention to the warnings!

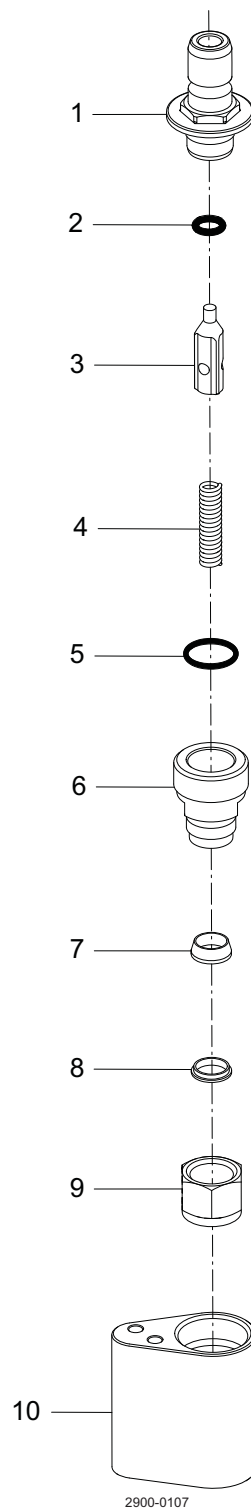
Parts list

Pos.	Qty	Denomination
1	1	Lock ring
2	1	Handle insert
3	1	Lock ring
4	1	Handle
5	1	O-ring
6	1	Spring
7	3	Ball
8	1	Body
9	1	Male quick connect

6 Parts list and service kits

Study the instructions carefully and pay special attention to the warnings!

6.2 Male Quick Connection



6 Parts list and service kits

Study the instructions carefully and pay special attention to the warnings!

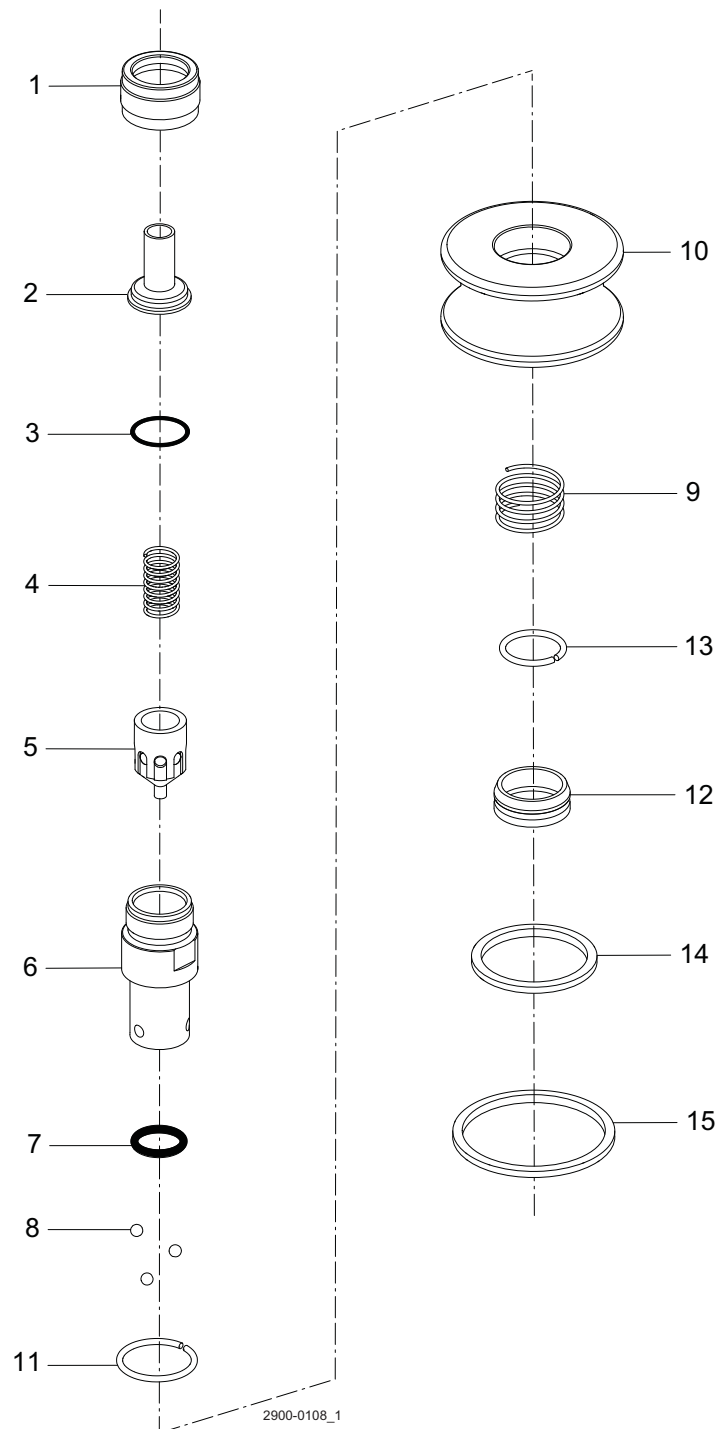
Parts list

Pos.	Qty	Denomination
1	1	Male part
2	1	O-ring
3	1	Plug
4	1	Spring
5	1	O-ring
6	1	Tube fitting, male coupling Ø10
7	1	Front ferrule tube fitting Ø10
8	1	Back ferrule tube fitting Ø10
9	1	Nut
10	1	Handle

6 Parts list and service kits

Study the instructions carefully and pay special attention to the warnings!

6.3 Female Quick Connection



6 Parts list and service kits

Study the instructions carefully and pay special attention to the warnings!

Parts list

Pos.	Qty	Denomination
1	1	Nut
2	1	Inlet
3	1	O-ring
4	1	Spring
5	1	Plug
6	1	Female part
7	1	O-ring
8	3	Ball
9	1	Spring
10	1	Handle
11	1	Lock ring
12	1	Handle insert
13	1	Lock ring
14	1	Ring
15	1	Ring

How to contact Alfa Laval

Contact details for all countries are continually updated on our website.

Please visit www.alfalaval.com to access the information directly.

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