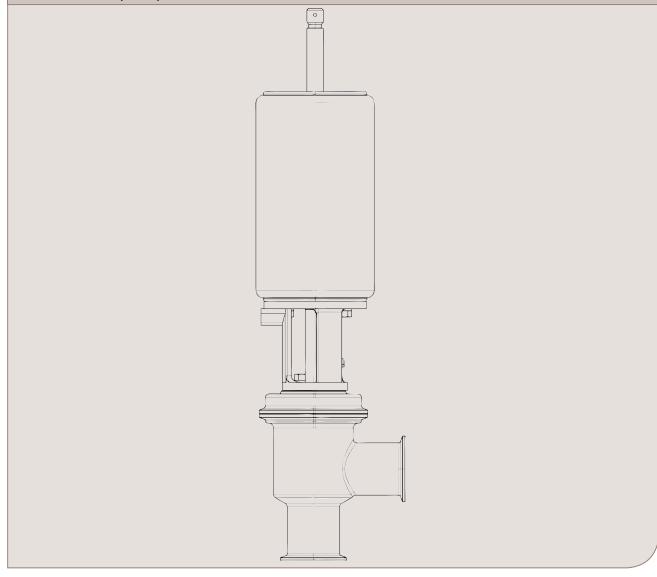


# Instruction Manual

# Series 741, 761, 762 & 771 Air-Actuated Valves



ESE03384-ENUS2

1810

Original manual



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

1.	Safety	<b>4</b> 4
2.	Introduction 2.1. About this manual	<b>5</b> 5
3.	Maintenance 3.1. Valve Disassembly 3.2. Valve Component Inspection 3.3. Valve Assembly 3.4. TR and TR2 Stem/Seat Assembly 3.5. Type 10, 20, and 30 Actuator 3.6. Type 80 Actuator 3.7. Type 15 And 25 Actuator	10 10 12 13 14 15 17
4.	Spare Parts 4.1. 741/761 Divert Valve 4.2. 741/761 Shut Off Valve 4.3. 761 Reverse-Acting Valve 4.4. 761 Y-Body Valve 4.5. 762 Kettle Valve 4.6. 762 Tank Outlet Valve 4.7. 762 Tangential Valve 4.8. 771S Divert Valve 4.9. 771S Reverse-Acting Valve 4.10.771S Throttling Valve 4.11. Type 15 25 Valve Actuators 4.12. Diaphragm Actuators with Siemens Positioner 771S Series 1" 4.13. Diaphragm Actuators with Siemens Positioner 771 1-1/2" to 3" Valves 4.14. 736-X Swap Valve Short Stroke Stems 4.16. 736TR-X Swap Valve Short Stroke Stems 4.17. 736TR-X Swap Valve Long Stroke Stems 4.18. 736TR2-X Swap Valve Short Stroke Stems 4.18. 736TR2-X Swap Valve Long Stroke Stems 4.19. 736TR2-X Swap Valve Long Stroke Stems 4.19. 736TR2-X Swap Valve Long Stroke Stems	22 24 26 28 30 33 36 38 40 42 44 46 48 50 52 54 56 58 60
5.	Spares Dimensions 5.1. Tank and Kettle Valve Flange, Ferrule, Tank Pods Dimensions and Part Numbers 5.2. Actuators 5.3. 761/741 TR Shut-Off TR/TR2 Stems 5.4. 700/800 LP Shut-Off Stems 5.5. 700/800 Spherical Shut-Off Stems (replaced by "LP" stems) 5.6. 700/800 Spherical Stems (Replaced by "LP" stems) 5.7. 700 RA "LP" Stems 5.8. 700/800 LP Divert Stems 5.9. 761/741 Spherical Divert LS (Long Stroke) Stems 5.10. Bonded TR & TR2 Kettle/Tank Outlet/Tangential Valve Stems	62 62 65 65 70 71 72 74 76 79

## 1 Safety

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## 1.1 Important information

**Safety is very important! DO NOT** attempt to modify any Alfa Laval product. To do so could create unsafe conditions and void all warranties. **DO NOT** place any Tri-Clover product in an application where general product service ratings are exceeded.

The following DANGER, WARNING, and CAUTION signs and their meanings are used within these instructions.



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. The word Danger is used in the most extreme cases.



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



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. May also be used to alert against an unsafe operating or maintenance practice.

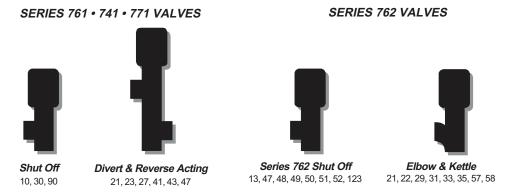
#### CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### 2.1 About this manual

This manual is for standard valve assemblies and actuators. A separate service manual is available for the control top module option. All 700 series valves are compatible with the optional control top module that can provide valve position feedback with limit switches or proximity sensors, and an integrally mounted solenoid air control valve. Refer to the Control Housings Service Manual (CTASM) for more information on maintenance and components of the control top module.

**IMPORTANT:** Throughout this manual, instructions for all valves have been grouped by body type. Refer below to find your valve body type before continuing to any of the following sections.



## General Information - 761/741 SHUT OFF DIVERT REVERSE ACTING SHUT OFF Series 761 Available Valve Styles

Each Alfa Laval Inc. Air-Actuated Valve is identified by a model number. The model number consists of five groupings or coding as shown below:

## Sample Valve Part Number:

1 Valve Series

Molded rubber seat(s) 761TR PTFE Snap-On seat(s) 761TR2 PTFE Snap-On seat(s)

2 Body Style/Port Connection\*

Lower tee/Tri-Clamp®

21M Lower tee, Upper tee/Tri-Clamp 23M Lower cross, Upper tee/Tri-Clamp Upper tee/Tri-Clamp

27M 30M Lower cross/Tri-Clamp

Lower cross, Upper tee/Tri-Clamp Lower cross, Upper cross/Tri-Clamp 41M 43M

47M Upper cross/Tri-Clamp

3 Actuator Types

4 Port Size (tube OD)

Long stroke, normally open 10L 10S Short stroke, normally open 20L Long stroke, normally closed Short stroke, normally closed 30L 30M Long stroke, air both ways 30S Short stroke, air both ways Mid-Position

80S

1, 1 1/2", 2", 2 1/2", 3", 4"

## 5 Material

316L Stainless Steel

<sup>\*&</sup>quot;M" designated standard Tri-Clamp port connection. Other port connections are available upon application, e.g. Tri-Weld®, designed by "W". Specify the type of port connection required when ordering replacement bodies below.

## General Information - 771 THROTTLING Series 761 Available Valve Styles

Each Tri-Clover Air-Actuated Valve is identified by a model number. The model number consists of five groupings or coding as shown below:

Sample Valve Part Number:

1 Valve Series

Short Stroke

2 Body Style/Port Connection\*

Lower tee/Tri-Clamp®

21M Lower tee, Upper tee/Tri-Clamp

27M Upper tee/Tri-Clamp 30M Lower cross/Tri-Clamp

3 Actuator Types

10

Normally open (positioner) Diaph 14D

14P Normally open (positioner) Piston

20 Normally closed

15 Diaphragm (normally open)

24D Normally closed (positioner) Diaph (reverse acting only)

24P Normally closed (positioner) Piston

25 Diaphragm (normally closed) (Reverse acting only)

4 Port Size (tube OD) 1, 1 1/2", 2", 2 1/2", 3", 4"

5 Material

316L Stainless Steel

\*"M" designated standard Tri-Clamp port connection. Other port connections are available upon application, e.g. Tri-Weld®, designed by "W". Specify the type of port connection required when ordering replacement bodies below.

## General Information - 762 KETTLE • TANK OUTLET • TANGENTIAL Series 762 Available Valve Styles

Each Tri-Clover Air-Actuated Valve is identified by a model number. The model number consists of five groupings or coding as shown below:

Sample Valve Part Number:

1 Valve Series

762

### 2 Body Style/Port Connection\*

#### Kettle Valves

29M 90° Elbow-Flanged/Tri-Clamp 31M 90° Elbow/Tri-Clamp®

45° Elbow-Flanged/Tri-Clamp 33M

35M 45° Elbow/Tri-Clamp

## Tank Outlet Valves

90° Tee-Flanged/Tri-Clamp 90° Elbow/Tri-Clamp 13M 21M 22M 90° Offset Front/Tri-Clamp 57M 90° Elbow-Right Offset/Tri-Clamp 90° Elbow-Left Offset/Tri-Clamp 90° Tee/Tri-Clamp 58M

123M

#### Tangential Valves

47M 90° Right Hand Outlet/Tri-Clamp 90° Left Hand Outlet/Tri-Clamp 48M

90° Right Hand Outlet-Flanged/Tri-Clamp 49M 90° Left Hand Outlet-Flanged/Tri-Clamp

50M 51M Cross Body/Tri-Clamp 52M Cross Body-Flanged/Tri-Clamp

3 Actuator Types

10L Long stroke, normally open Short stroke, normally open 10S 20L Long stroke, normally closed 20S Short stroke, normally closed

#### 4 Port Size (tube OD)

2", 2 1/2", 3", 4"

### 5 Material

316L Stainless Steel

<sup>\*&</sup>quot;M" designated standard Tri-Clamp port connection. Other port connections are available upon application, e.g. Tri-Weld®, designed by "W". Specify the type of port connection required when ordering replacement bodies below.

## General Information - 761 Y-BODY Series 761 Available Valve Styles

Each Tri-Clover Air-Actuated Valve is identified by a model number. The model number consists of five groupings or coding as shown below:

Sample Valve Part Number:

1 Valve Series

761 - Molded rubber seat(s) 761TR - PTFE Snap-On seat(s)

2 Body Style/Port Connection\*

P0M - Y-Body/Tri-Clamp®

3 Actuator Types

10L - Long stroke, normally open 20L - Long stroke, normally closed

4 Port Size (tube OD)

1 1/2", 2", 2 1/2", 3", 4"

5 Material

316L Stainless Steel

\*"M" designated standard Tri-Clamp port connection. Other port connections are available upon application, e.g. Tri-Weld®, designed by "W". Specify the type of port connection required when ordering replacement bodies below.

## 3 Maintenance

Always use Alfa Laval genuine spare parts.

## 3.1 Valve Disassembly

IMPORTANT: Check your air supply before installing this valve. Air-Actuated valves require clean, filtered air to operate properly.

Commonly used air compressors can pickup moisture/humidity in the air, dirt, and oil used in the compressor itself, and pass them along throughout your system, if not filtered properly. While some newer air compressors are oil-free, many commonly used are not. In the past few years, compressor manufacturers have switched from standard petroleum based lubricating oils to SYNTHETIC OILS, as they are thought to make the compressor run more efficiently, and can be changed less often.

However, SYNTHETIC OILS, which can get into the air supply, can cause damage to valve bodies and solenoids, as well as other processing equipment, by affecting the elastomers and/or plastics that come in contact with the air supply.

Special "coalescing" filter regulators and solenoid guards are commercially available to help avert this potential problem, and remove oils and other damaging elements from the air downstream from the air compressor. These filters and other components can be installed downline from the compressor, as well as on control panels, to help minimize the problem, by further cleaning the air before it gets to your valves and system components. Filter elements should be changed at least once a year, as part of your normal plant maintenance program.

#### IMPORTANT: Use C-137 Thread Lubricant actuators.

These lubricants have been formulated especially to ensure trouble free assembly of actuators. C137 is a non-USDA rated lubricant that helps to prevent thread galling.

#### How to Use

Before reassembly of any actuator, apply a thin bead of C137 lubricant on the lower threads of the cylinder.

THE C137 LUBRICANT IS NOT INTENDED FOR USE ON VALVE STEM SEALS, BODY GASKET OR ANY PRODUCT CONTACT SURFACE.

Alfa Laval offers C137 in 1 ounce tubes. For further information refer to your Actuator Service Bulletin, or contact your Alfa Laval distributor.



To prevent personal injury, keep hands and tools out of and away from valve bodies and stems when applying or releasing air to an actuator. The actuator stem assembly moves with extreme force and suddenness.

#### SHUT OFF & DIVERT VALVES

Apply 60 psig air to the air connection on yoke. This will lift the stem from the valve seat. (Normally Closed Valves Only). Loosen clamp wing nut and remove clamp.

### SHUT OFF

Separate the valve body from the valve bonnet and remove body gasket.

#### **DIVERT**

Separate the lower valve body from the upper valve body and remove body gasket.

## SHUT OFF & DIVERT VALVES

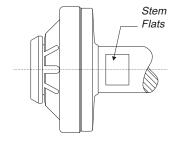
Remove air supply to actuator.

Always use Alfa Laval genuine spare parts.

## **DIVERT, ELBOW & KETTLE**

Apply 60 psig air to the end cap. This will extend the plug away from the valve seat. Separate the valve stem from the actuator stem. This is done by placing an open end wrench around the valve stem flats and then turning counter clockwise. Once the threads between the two stems disengage, pull stem away from the actuator until it exits the body or bonnet.

Remove air supply to actuator.



### SHUT OFF

Separate bonnet from yoke by removing three bolts. Remove split bushing and o-ring from valve bonnet.



Shut Off

#### **DIVERT & ELBOW**

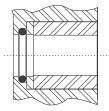
#### DIVERT

Separate upper valve body from yoke by removing three bolts. Remove split bushing, washer and o-ring from upper body.

## **ELBOW**

Separate elbow valve body from yoke by removing three bolts. Remove split bushing, sleeve and o-ring from body.

Separate yoke from actuator by removing four bolts. Remove green bushing retainer and o-ring between yoke and actuator.



Divert & Elbow

## SHUT OFF, DIVERT, ELBOW & KETTLE VALVES

Separate green end cap from actuator by removing all four bolts. Remove the two o-rings that are between the end cap and actuator. Push the clear stem protector out of the end cap and remove o-ring. Pull off red indicator cap from actuator stem.

## 3 Maintenance

Always use Alfa Laval genuine spare parts.

## 3.2 Valve Component Inspection

## VALVE BODY SEAT(s)

Inspect for nicks and scratches and other signs of excessive wear. Leakage past the seat(s) may result from these types of irregularities.

## VALVE STEM & SEAT(S)

Inspect rubber or PTFE seat(s) for signs of cracking, tearing, checking, or excessive wear. Note: Refer to the TR2-Seat Replacement section for installation of TR Seats. Inspect stem finish for galling, nicks, or scratches. Leakage may result from these irregularities.

## SPLIT BUSHING

Inspect for signs of cracks, nicks, scratches or excessive wear on inside diameter. A worn bushing will not properly align valve stem.

## O-RING(S)

Inspect for cuts, abrasions, flat spots, or other damage that would cause leakage or ineffective cleaning.

Always use Alfa Laval genuine spare parts.

## 3.3 Valve Assembly



To prevent personal injury, keep hands and tools out of and away from valve bodies and stems when applying or releasing air to an actuator. The actuator stem assembly moves with extreme force and suddenness.

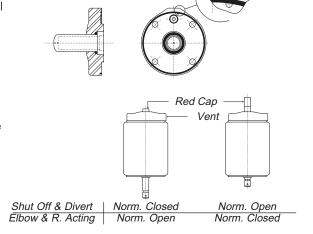
**IMPORTANT:** Replace all worn or damaged components as required. Spray stem and o-ring with Sanitary Lubricant. Make sure all valve bodies are mated properly before securing with clamps. Tighten all clamps securely to assure proper alignment. When disassembling and assembling valve, bench area should be clean to prevent marking and nicking of seats.

Place all three o-rings into green end cap grooves.

**IMPORTANT:** When installing largest diameter o-ring, start o-ring in groove opposite air relief notch and work it in towards notch. Be careful not to stretch o-ring.

**IMPORTANT:** 761-90 Y-Body and 4" Long Stroke Valves - stem protector assembly consist of two pieces plus o-ring.

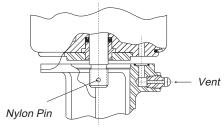
**IMPORTANT:** Determine valve operation (Normally Open or Normally Closed). Push red indicator cap over actuator stem thread. Place end cap assembly over the actuator stem with red cap. Align the air port of the end cap with unthreaded thru hole in actuator. Fasten end cap to actuator with four bolts and lockwashers. Define the vent plug location and insert in either the end cap or yoke.



Place o-ring into counter bore above air port on yoke. Place green bearing retainer into bottom of actuator. Place actuator onto yoke. Align yoke air port with unthreaded thru hole

Place actuator onto yoke. Align yoke air port with unthreaded thru hole in actuator.

Fasten with four bolts and lock washers.



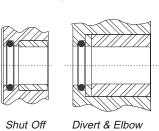
#### SHUT OFF

Lubricate o-ring with Sanitary Silicone Spray. Insert o-ring and split bushing into bonnet.

#### **DIVERT AND ELBOW**

Lubricate o-ring with Sanitary Silicone Spray. Insert o-ring into body, place required washer or sleeve on top of o-ring, place split bushing on top of this component. Fasten bonnet or body to yoke with three bolts and lock washers.

**IMPORTANT:** Replace nylon lock before threading valve stem onto actuator stem, see section TYPE 10, 20 & 30 Actuator.



#### **DIVERT AND ELBOW**

Apply 60psig air to actuator - (Normally Open Divert and Normally Closed Elbow Valves Only).

## SHUT OFF, DIVERT, ELBOW & KETTLE

Push valve stem through bonnet until it meets the actuator stem. Partially thread valve stem onto actuator stem by hand until nylon lock resistance is felt. Apply an open end wrench over the valve stem flats, turn clock wise and tighten until valve stem meets actuator stem shoulder.

## 3 Maintenance

Always use Alfa Laval genuine spare parts.

Place gasket in body groove and clamp together. Cycle valve at least 6 times. Operate all valves after assembly to be sure they are operating correctly. Inspect all air line connections for leaks.

## 3.4 TR and TR2 Stem/Seat Assembly

#### REMOVAL OF PTFE SNAP-ON SEAT

- 1. Refer to valve disassembly section to remove stem / seat assembly from valve.
- Using a knife, partially cut through the upper ring portion of Snap-On Seat, avoiding contact with stainless steel stem. Grasp both cut ends of Snap-On Seat and force apart for removal from Stem. Since there are no slots, the TR2 seat will require cutting through sides and base of seat.

## INSTALLATION OF REPLACEMENT PTFE SNAP-ON SEAT

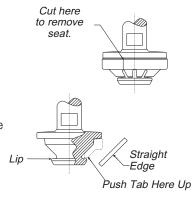
The Alfa Laval replacement Snap-On Seats do not require heat or special tools for proper installation. Snap-On Seats are installed by applying uniform pressure on all sides. Pressure can be applied by using a Tri- Clamp or Bevel Seat ferrule the same size as the valve. Due to the greater force required to instal the TR2 style seat, we recommend using a TR2 seat tool. This holds the seat more securely and can also be used on standard TR seat installation. See parts list for tool numbers.

### SHUT OFF VALVE OR LOWER SEAT OF DIVERT VALVE

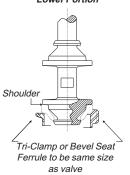
- 1. Place Snap-On Seat on the lower portion of the stem.
- 2. Place assembly from Step 1 on Tri-Clamp or Bevel Seat ferrule, resting on a hard flat surface such as a bench or table.
- 3. Apply firm even downward pressure on the stem until the Snap-On Seat hits the shoulder of the stem and snaps into place.
- 4. Examine seat assembly to be sure each individual tab is secure under the smaller lip portion of the stem. Press tabs down with your fingers or a straight edge. Holding Stem/Seat Assembly in one hand, rotate the Snap-On Seat. For proper CIP cleaning the seat should turn freely on the stem.
- 5. Refer to valve assembly section for reassembly.

## UPPER SEAT OF DIVERT VALVE

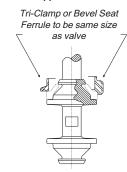
- 1. Place Snap-On Seat on the upper portion of the stem.
- 2. Place Tri-Clamp or Bevel Seat ferrule on top of assembly, resting on a hard, flat surface such as a bench or table.
- 3. Apply firm, even, downward pressure of Tri-Clamp or Bevel Seat ferrule until Snap-On Seat hits the shoulder of the stem and snaps into place.
- 4. Examine Seat Assembly to be sure individual tab is secure under the smaller lip portion of the stem. Press tabs down with your fingers or a straight edge. Holding Seat Assembly in one hand, rotate the Snap- On Seat. For proper CIP cleaning, seat should turn freely on the Stem.
- 5. Refer to valve assembly section for assembly.



#### Lower Portion



#### Upper Portion



Always use Alfa Laval genuine spare parts.

## 3.5 Type 10, 20, and 30 Actuator

#### INTRODUCTION

This section covers servicing of the following actuators: Type 10L - 10S (normally open), Type 20L - 20S (Normally Closed) Long and Short, and Type 30L - 30S (Air Both Ways).

The 10 and 20 actuators are identical; with spring return operation. The change in description is for describing the mode of operation when coupled to a valve. "10" defines normally open (air to lower) and "20" defines normally closed (air to close) operation, but physically they are the same. Type 30 is a double acting actuator that is identical to the 10/20 except it does not contain a spring. These actuators will require minimum maintenance over many years of service.

IMPORTANT:

Additional air supply must be relieved when product pressure is not present. Failure to do so will result in pressure damage to the seat.

When using additional air loading it should exceed the minimum required by no more than 3 to 5 psig.



To prevent personal injury, do not attempt to cut the actuator open. The actuator spring is compressed and under load.

Valve Size	*Add'l Air Pressure	Add'l Air Pressure Maximum	Maximum Product Holding
			<u>Pressure</u>
1	1	10	200
1 1/2	1	5	200
2	2	10	150
2 2 1/2	3	20	100
3	3 1/2	35	100
4h	5	30	100
4	15	60	100

Air pressure measured in psig.

## **INSTALLATION**

Connect air supply to the 1/8-27 FNPT port(s) located on the green end cap or yoke. Air supply specifications: 60 to 80 psig for spring return (Type 10 & 20); 35 psig for double acting (Type 30). Refer to table at right if additional product holding pressure is required on normally closed Type 20 actuators.

#### Bushing/Packing Replacement

Bushings guide the actuator stem while packings provide sealing around the stem. The bushing and packing should both be replaced if one or the other fails. Even if only one end fails both ends of the actuator should be serviced. Disconnect and remove actuator completely from valve before proceeding with the steps that follow, see Valve Disassembly.

### Step 1

Remove end cap from actuator. Separate clear stem protector from the end cap. Fasten the end cap without stem protector to one end of the actuator.



To prevent personal injury, keep hands and tools out of and away from valve bodies and stems when applying or releasing air to an actuator. The actuator stem assembly moves with extreme force and suddenness.



To prevent personal injury, do not attempt to remove the bushing or packing without the endcap fastened to the actuator. The packing and bushing will be forced out of the actuator under air pressure and will be trapped by the end cap.



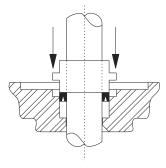
<sup>\*</sup>Additional air pressure required to hold against 10 psig product pressure.

## 3 Maintenance

Always use Alfa Laval genuine spare parts.

## Step 2

Apply 60 psig air to end cap. The packing and bushing will be forced out of their counter bores, which will result in an air leak.



#### Step 3

Remove air supply once the bushing and packing are forced out.

#### Step 4

Remove end cap, bushing, and packing from the actuator and repeat at other end of actuator.

#### Step 5

Place red indicator cap over the actuator stem threads.

#### Step 6

Wipe stem clean. Lubricate new packings with C137 lubricant.

#### Step 7

Slide new packing over the red indicator cap/stem with the "v" side facing the actuator. Partially insert packing into smallest counter bore using a flat tool to assist the outer lip **DO NOT** DAMAGE OR ROLL THE PACKING LIP DURING INSTALLATION.

## Step 8

Remove the red indicator cap. Place bushing on top of the packing. Push on the bushing until outer flange is flush with the actuator.

#### Step 9

Repeat to the other end of the actuator.

## ACTUATOR STEM NYLON LOCK REPLACEMENT

The Nylon Locking Pin located in the middle of the stem thread keeps the valve stem from becoming loose due to vibrations. After every disassembly, the nylon locking pin must be replaced. Punch out the old nylon pin with an 1/8 inch or smaller diameter punch. Insert a new nylon locking pin.

## **ACTUATOR LUBRICATION**

For optimum performance, lubricate once annually. Inject C137 or STP oil treatment into the unthreaded thru hole in each end of the actuator. Roll actuator on a flat surface repeatedly to obtain uniform coverage of lubricant. Do not over lubricate. This is not a remedy for actuator failure.

Always use Alfa Laval genuine spare parts.

## 3.6 Type 80 Actuator

#### INTRODUCTION

Type 80 is a three position actuator that will require minimum maintenance. It is similar to the Type 10 & 20 spring return actuators except for a mid position adjustment assembly. Installation, adjustment, maintenance, partial disassembly, and assembly instructions are covered below.

#### INSTALLATION

Connect air supply to the two 1/8-27 FNPT ports. Each port is identified permanently to indicate operation. MID — air supply causes actuator to extend to mid position. FULL — air supply causes actuator to extend fully. Air Supply Specification: 60 - 80 psig.

#### **ADJUSTMENT**

There is one adjustment and it sets the mid position stop. This stop determines the length of mid position stroke.

#### Step 1

Loosen four end cap bolts until plastic adjustment knob can be turned by hand.

#### Step 2

Turn plastic knob as described below for required action. COUNTERCLOCKWISE — Increase Stroke, CLOCKWISE — Decrease Stroke.

#### Step 3

Tighten four end cap bolts.

#### **BUSHING/PACKING REMOVAL**

The valve end contains one bushing and packing identical to Type 10, 20, and 30 actuators. They are located on the valve end of the actuator.

### Step :

Disassemble the actuator from the valve completely.

## Step 2

Assemble the yoke to the actuator without the green bushing retainer. Assemble the valve stem to the actuator stem.



To prevent personal injury, DO NOT attempt to remove the packing and bushing without the valve stem threaded onto the actuator stem. The stem is required because the packing and bushing will be forced out of the actuator under air pressure and will be trapped by the valve stem.

## Step 3

Apply 60 psig to the yoke. The packing and bushing will be forced out which will result in an air leak. Remove air supply once the bushing and packing are forced out.

#### Step 4

Remove the valve stem & yoke.

## BUSHING / PACKING REPLACEMENT, NYLON LOCK REPLACEMENT AND LUBRICATION

**IMPORTANT:** The TYPE 80 actuator does not have a red indicating cap like the type 10, 20 or 30 actuator. Cover the actuator stem threads with tape to protect the new bushing and packing from damage during assembly. See Type 10, 20, AND 30 Actuator Maintenance.

## 3 Maintenance

Always use Alfa Laval genuine spare parts.

#### Disassembly

#### Step 1

Separate adjustment knob and cover plate by removing four bolts.

### Step 2

Remove E-ring and unscrew adjustment nut from actuator stem completely.

#### Step 3

Remove spacer, end cap, bushing, retainer, and o-ring from actuator.

#### Assembly

### Step 1

Lubricate o-ring with L1011 Sanitary Silicone Spray. Insert o-ring, retainer, and bushing into actuator.

#### Step 2

Install three o-rings into end cap. Place end cap over actuator stem aligning air port labeled MID with unthreaded thru hole in actuator.

#### Step 3

Place spacer on top of end cap, screw adjusting nut on actuator stem, and install E-ring in groove on actuator stem.

#### Step 4

Align adjustment knob slots with adjustment nut. Slide cover over spacer.

#### Step 5

Place cover plate over adjustment knob and fasten with four bolts and lock washers.

## 3.7 Type 15 And 25 Actuator

#### INTRODUCTION

This actuator is a spring return diaphragm unit designed to utilizes a diaphragm for reduced friction. It can be completely disassembled and rebuilt using Tri-Clover Replacement parts. Installation, maintenance, disassembly, and assembly instructions are covered below.

#### INSTALLATION

Connect air supply to coupler. Air Supply Specifications: 35 - 50 psig (Normal)

## DIAPHRAGM REPLACEMENT

The diaphragm can rupture. When it fails air will leak from the actuator vent plug. Follow the disassembly and assembly instructions below.

IMPORTANT: The bushing and packing must be replaced if a diaphragm fails.

## **BUSHING/PACKING REMOVAL**

The valve end contains one bushing and packing identical to Type 10, 20, and 30 actuators.

They are located on the valve end of the actuator.

#### Step 1

Disassemble the actuator from the valve completely.

Always use Alfa Laval genuine spare parts.

## Step 2

Assemble the yoke to the actuator without the green bushing retainer. Assemble the valve stem to the actuator stem.



To prevent personal injury, DO NOT attempt to remove the packing and bushing without the valve stem threaded onto the actuator stem. The stem is required because the packing and bushing will be forced out of the actuator under air pressure and will be trapped by the valve stem.

#### Step 3

Apply 60 psig to the yoke. The packing and bushing will be forced out which will result in an air leak. Remove air supply once the bushing and packing are forced are forced out.

#### Step 4

Remove the valve stem and yoke.

## 3 Maintenance

Always use Alfa Laval genuine spare parts.

#### BUSHING / PACKING REPLACEMENT, NYLON LOCK REPLACEMENT AND LUBRICATION

**IMPORTANT:** The TYPE 15/25 actuator does not have a red indicating cap like the type 10, 20 or 30 actuator. Cover the actuator stem threads with tape to protect the new bushing and packing from damage during assembly. See TYPE 10, 20, AND 30 ACTUATOR MAINTENANCE.

#### DISASSEMBLY

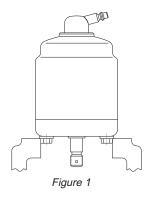
Actuator spring is not contained. Although preload force is low, caution must be used when spring force is released. Hand pressure must be applied to the cylinder top restricting its travel. Completely remove the actuator from the valve and follow the steps below.

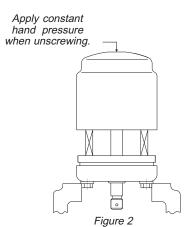
- 1. Insert four bolts into bonnet and clamp into vise as illustrated in Figure 2
- 2. Remove air coupler adapter and nut by turning counterclockwise.
- 3. Remove actuator cylinder from bonnet by applying a strap wrench to the cylinder and turn counter clockwise completely two times.

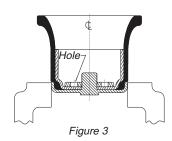


To prevent injury, apply constant hand pressure and unscrew completely. Spring force will push the cylinder up when threads disengage. See Figure 2.

- 4. Pull cylinder assembly off the bonnet and remove spring.
- Separate diaphragm assembly from cylinder by holding cylinder and pulling on actuator stem.
- 6. Place diaphragm assembly into a vise and secure Inner Diaphragm Guide as illustrated in Figure 3. Do Not over tighten. Remove stem by locating a wrench around the flats and turn counter clockwise. Remove adapter and nut. The nut may be removed by inserting a punch into the hole in its face, and tapping nut counter clockwise.
- 7. Remove diaphragm assembly from vise and separate.







Always use Alfa Laval genuine spare parts.

#### **ASSEMBLY**

#### Step 1

Clamp the Inner Diaphragm Guide in a vise with its threaded stud facing upward.

#### Step 2

Set the diaphragm into the Inner Guide, set the Inner Diaphragm Clamp inside the diaphragm, screw on the Nut until hand tight. Thread on the adapter and tighten to 15 ft.-lbs.

#### Step 3

Lubricate the diaphragm inside and outside completely with L1011 Sanitary Silicone Spray. Roll the diaphragm onto outer diaphragm clamp. Slide body insert onto outer diaphragm retainer.

#### Step 4

Carefully slide diaphragm assembly into cylinder. Do Not scratch, tear or abrade diaphragm.

#### Step 5

Install sealing nut, gasket and air coupler adapter.

#### Step 6

Clamp bonnet into vise locating on the four mounting bolts. Place spring into bonnet.

#### Step 7

Lubricate the cylinder threads with Tri-Clover C137. This will help prevent the threads from galling. Place cylinder assembly onto spring.



To prevent injury, compress spring by hand and thread cylinder onto bonnet for at least 3 complete turns. Apply a strap wrench to cylinder and tighten until it "bottoms" onto bonnet.

## Step 8

Remove actuator from vise. Insert packing and bushing into counter bores on bonnet.

#### Step 9

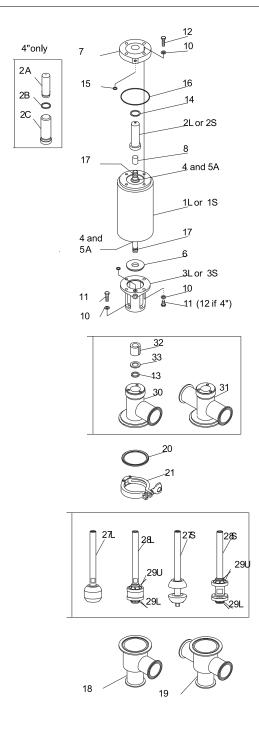
Apply Removable Loctite\* to the fine threads of the actuator stem. Push actuator stem through bonnet and thread into adapter. Fasten completely with a wrench using stem flats.

(\*Loctite is a registered trademark of Loctite Corporation)

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## 4.1 741/761 Divert Valve



## Parts list

Pos.	Qty	Denomination
1L	1	Actuator
1M	1	Mid position actuator/short
1S	1	actuator, short
1HPL	1	HP actuator,long
1HPS	1	HP actuator,short
2A	1	Stem protector, long
2B	1	Stem protector o ring
2C	1	Stem protector, spacer
2L	1	Stem protector, long
2S	1	Stem protector
3L	1	Yoke, long
3S	1	Yoke, short
4	2	Seal retainer
5 □◆0	2	V-packing
5A	2	O-ring to replace v packing
6 □◆○	1	Packing retainer
7	1	End cap
8	1	Red caplug
9	1	Vent plug (not shown)
10	11	Lockwasher
11	7	Screw
12	4	Screw
13 □◆0	1	O-ring stem
14	1	O-ring
15 □◆0	2	O-ring
16	1	O-ring
17 □◆0	1	Nylon lock pin
18	1	Body
19	1	Body
20 □◆○	1	Body gasket
21	1	Clamp
27L	1	Stem
27S	1	Stem LP
28L	1	Stem
28S	1	Stem
29L ◆	1	Seat
29U ◆ 30	1	Seat Body
31	1	Body
-	1	Stem bushing
	1	
33	ı	Seal retaining washer

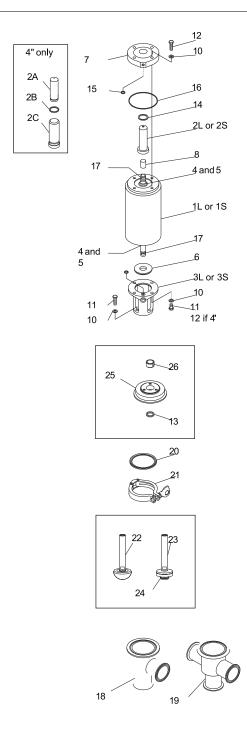
## Service kits

	Denomination	1 1/2"	2"	2 1/2"	3"	4"
	Non TR Service Kit Buna	9613990327	9613990327	9613990508	9613990330	9613990333
	Non TR Service Kit EPDM	9613990328	9613990328	9613990509	9613990331	9613990334
	Non TR Service Kit SFY	9613990329	9613990329	9613990510	9613990332	9613990335
•	TR Service Kit Buna	9613990106	9613990109	9613990112	9613990115	9613990118
•	TR Service Kit EPDM	9613990107	9613990110	9613990113	9613990116	9613990119
•	TR Service Kit SFY	9613990108	9613990111	9613990114	9613990117	9613990120
0	TR2 Service Kits Buna	9613990575	9613990578	9613990581	9613990584	9613990587
0	TR2 Service Kits EPDM	9613990576	9613990579	9613990582	9613990585	9613990588
0	TR2 Service Kits SFY	9613990577	9613990580	9613990583	9613990586	9613990589

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## 4.2 741/761 Shut Off Valve



## Parts list

Pos.	Qty	Denomination
1	1	1 Mid position actuator, short
1L	1	Actuator
1S	1	Actuator
1HPL	1	HP actuator, long
1HPS	1	HP actuator, short
2A	1	Stem protector, long
2B	1	Stem protector O-ring
2C	1	Stem protector, spacer
2L	1	Stem protector, long
2S	1	Stem protector
3L	1	Yoke, long
3S	1	Yoke, short
4	2	Seal retainer
5 □•0	2 2	V-packing
5A	2	O-ring to replace V-packing
6 □•○	1	Packing retainer
7	1	End cap
8	1	Red caplug
9	1	Vent plug (not shown)
10	11	Lockwasher
11	7	Screw
12	4	Screw
13 □•0	1	O-ring stem
14	1	O-ring
15 □•0	2	O-ring
16	1	O-ring
17 □◆0	1	Nylon lock pin
18	1	Body lower 2 ports
19	1	Body lower 3 ports
20 □•○	1	Body gasket
21	1	Clamp
22	1	Valve plug
23	1	TR stem/seat assembly
	1	TR2 valve plug
24 ♦	1	Seat
25	1	Bonnet
26 □•○	1	Stem bushing

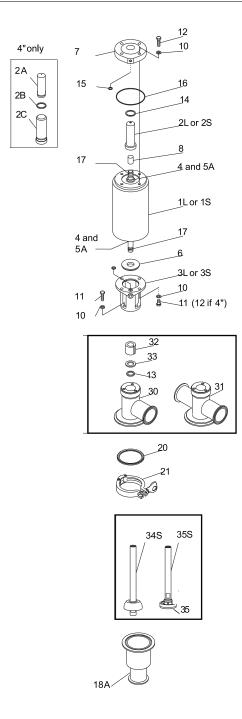
## Service kits

	Denomination	1"	1 1/2"	2"	2 1/2"	3"	4"
	Non TR Service Kit Buna	9613990336	9613990339	9613990342	9613990345	9613990348	9613990351
	Non TR Service Kit EPDM .	9613990337	9613990340	9613990343	9613990346	9613990349	9613990352
	Non TR Service Kit SFY	9613990338	9613990328	9613990344	9613990347	9613990350	9613990353
•	TR Service Kit Buna	9613990088	9613990091	9613990094	9613990097	9613990100	9613990103
•	TR Service Kit EPDM	9613990089	9613990092	9613990095	9613990098	9613990101	9613990104
•	TR Service Kit SFY	9613990090	9613990093	9613990096	9613990099	9613990102	9613990105
0	TR2 Service Kit Buna	9613990557	9613990560	9613990563	9613990566	9613990569	9613990572
0	TR2 Service Kit EPDM	9613990558	9613990561	9613990564	9613990567	9613990570	9613990573
0	TR2 Service Kit SFY	9613990559	9613990562	9613990565	9613990568	9613990571	9613990574

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## 4.3 761 Reverse-Acting Valve



## Parts list

Pos		Qty	Denomination
1L		1	10/20 actuator, long
1M		1	Mid position actuator/short
18		1	10/20 actuator, short
2A		1	Stem protector, long
2B		1	Stem protector O-ring
2C		1	Stem protector, spacer
2L		1	Stem protector, long
2S		1	Stem protector
3L		1	Yoke, long
3S		1	Yoke, short
4		2 2	Seal retainer
5		2	V-packing
5A		2	O-ring to replace v packing
6	□♦○	1	Pcking retainer
7		1	End cap
8		1	Red caplug
9		1	Vent plug (not shown)
10		11	Lockwasher
11 12		7 1	Screw Screw
13	□ <b>♦</b> O	1	O-ring stem
14		1	O-ring
15	□♦○	2	O-ring
16		1	O-ring
17	□♦○	1	Nylon lock pin
18A		1	Body lower
20	□♦○	1	Body gasket BUNA
21		1	Clamp
30		1	Body upper 2 ports clamp
32	□♦○	1	Stem bushing
33		1	Seal retaining washer
34S		1	Stem
35	•	1	Stem seat
35L		1	TR stem, long (27 & 47)
35S		1	Stem, short (27 & 47)

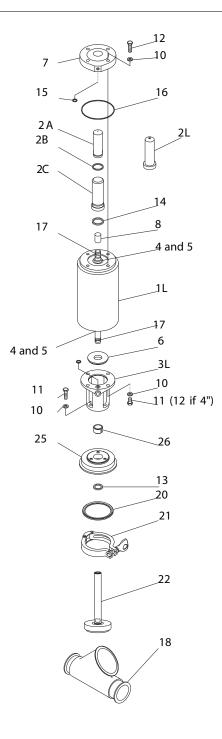
## Service kits

	Denomination	1 1/2"	2"	2 1/2"	3"	4"
	Non TR Service Kit Buna	9613990327	9613990327	9613990508	9613990330	9613990333
	Non TR Service Kit EPDM	9613990328	9613990328	9613990509	9613990331	9613990334
	Non TR Service Kit SFY	9613990329	9613990329	9613990510	9613990332	9613990335
•	TR Service Kit Buna	9613990106	9613990109	9613990112	9613990115	9613990118
•	TR Service Kit EPDM	9613990107	9613990110	9613990113	9613990116	9613990119
•	TR Service Kit SFY	9613990108	9613990111	9613990114	9613990117	9613990120
0	TR2 Service Kit Buna	9613990575	9613990578	9613990581	9613990584	9613990587
0	TR2 Service Kit EPDM	9613990576	9613990579	9613990582	9613990585	9613990588
0	TR2 Service Kit SFY	9613990577	9613990580	9613990583	9613990586	9613990589

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### 761 Y-Body Valve 4.4



## Parts list

Pos.	Qty	Denomination
1L	1	Actuator n/c
	1	Air to air
2A	1	Stem protector
2B	1	O-ring
2C	1	Spacer
2L	1	Stem protector, long
3L	1	Yoke
4	2	Seal retainer
5 🗆	2	V-packing
6 🗆	1	Packing retainer
7	1	End cap
8	1	Red caplug
9	1	Vent plug (not shown)
10	11	Lockwasher
11	3	Screw
12	8 1	Screw
13 🗆		O-ring BUNA
	1	O-ring EPDM
	1	O-ring SFY
14	1	O-ring
15 🗆	2	O-ring
16	1	O-ring
17 🗆	1	Nylon pin
18	1	Valve body 2 ports clamp
20 🗆	1	Body gasket BUNA
	1	Body gasket EPDM
	1	Body gasket SFY
21	1	Clamp
22	1	Stem BUNA
	1	Stem EPDM
	1	Stem SFY
	1	Stem TR
25	1	Seat TR
25 26 🗆	1	Bonnet Stem bushing
20 0	'	Storn busining

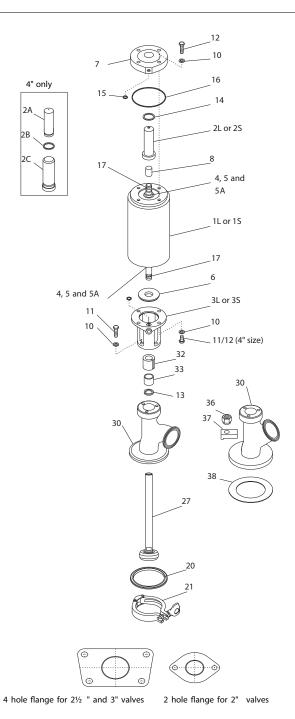
## Service kits

 Denomination	1 1/2"	2"	2 1/2"	3"	4"
Service Kit BUNA	9613990354	9613990357	9613990360	9613990363	9613990366
Service Kit EPDM	9613990355	9613990358	9613990361	9613990364	9613990367
Service Kit SFY	9613990356	9613990359	9613990362	9613990365	9613990368

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## 4.5 762 Kettle Valve



## Parts list

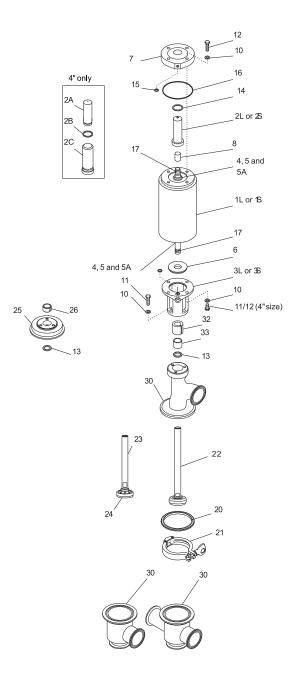
Pos.	Qty	Denomination
1L	1	Actuator long
2A	1	Stem protector long 4"
2B	1	Stem protector o-ring 4"
2C	1	Stem protector spacer 4"
2L	1	Stem protector long
3L	1	Yoke long
4 5 <b>□</b> ◆○	2	Retainer V-packing
5A	2	O-ring to replace v-packing
6 □•○	1	Packing retainer
7	1	End cap
8	1	Red capplug
9	1	Vent plug (not shown)
10	11	Lockwasher
11 12	7	Screw Screw
13 <b>□</b> •0	1	O-ring stem BUNA
□•0	1	O-ring stem EPDM
□♦○	1	O-ring stem SFY
14	1	O-ring
15 □•0	2	O-ring
16	1	O-ring
17 □•○	2	Nylon lock pin
20 □•○	1	Body gasket BUNA 31 & 35
□♦○	1	Body gasket EPDM 31 & 35
□♦○	1	Body gasket SFY 31 & 35
21	1	Clamp 31 & 35
24 ♦	1	TR snap on seat
0	1	TR2 snap on seat
27	1	Valve plug Buna
	1	Valve plug EPDM
	1	Valve plug SFY
	1	TR valve plug
	1	TR2 valve plug
30	1	Valve body 29
	1	Valve body 31
	1	Valve body 33
00	1	Valve body 35
32 □•○	1	Split bushing
33 36	1 4	Retainer Nut for 29 & 33
37	4	Clip for 29 & 33
38 □•○	1	Gasket BUNA 29 & 33
□♦○	1	Gasket EPDM 29 & 33
□•0	1	Gasket SFY 29 & 33
39	1	Tank ferrule 29 & 33 (not shown)
	1	Tank ferrule 31 & 35 (not shown)

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### Service kits Denomination 2" 2 1/2" 3" 4" Service Kits 29, 33 Non TR Service Kit Buna ..... П Non TR Service Kit SFY ...... 9613990311 Service Kits 31, 35 Non TR Service Kit SFY ...... 9613990383 Service Kits 29, 33 TR Service Kit SFY ...... 9613990299 Service kits 31, 35 Service kits 29, 33 TR2 Service Kit EPDM ...... 9613990522 Service kits 31, 35

#### 762 Tank Outlet Valve 4.6



Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## Parts list

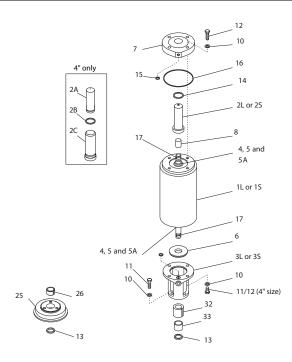
Pos.	Qty	Denomination		
1L	1	Actuator long 21,22,57,58		
	1	Actuator long 13 & 123		
1S	1	Actuator short		
2A	1	Stem protector long 4"		
2B	1	Stem protector o-ring 4"		
2C	1	Stem protector spacer 4"		
2L	1	Stem protector long		
3L	1	Yoke long		
4	2	Retainer		
5 □•0	2	V-packing		
5A □◆○	2	O-ring to replace V-packing		
6 □•0	1	Packing retainer		
7	1	End cap		
8	1	Red capplug		
9	1	Vent plug (not shown)		
10	11	Lockwasher		
11	7	Screw		
12 13 □•o	4 1	Screw O-ring stem BUNA		
□♦0	1	O-ring stem BONA O-ring stem EPDM		
□♦○	1	O-ring stem EPDM		
□♦○	1	O-ring stem SFY		
14	1	O-ring sterri Si 1		
15 □◆○	2	O-ring		
16	1	O-ring		
17 <b>□</b> ◆0	2	Nylon lock pin		
20 □◆0	1	Body gasket BUNA 13 & 123		
20 □♦0	1	Body gasket EPDM 13 & 123		
□♦○	1	Body gasket SFY 13 &123		
□♦○	1	Body gasket BUNA 21, 22, 57 &		
	'	58		
	1	Body gasket EPDM 21, 22, 57 &		
		58		
	1	Body gasket SFY 21, 22, 57 & 58		
21	1	Clamp 13 & 123		
	1	Clamp 21,22,57,58		
22	1	Valve plug BUNA 21,22,57,58		
	1	Valve plug EPDM 21,22,57,58		
	1	Valve plug SFY 21,22,57,58		
23	1	TR valve plug 13 & 123		
	1	TR2 valve plug 21, 22, 57, 58		
	1	TR2 valve plug 13 & 123		
24 ♦	1	TR snap on seat		
0	1	TR2 stem seat		
25	1	Bonnet 13 & 123		
26 □•0	1	Split bushing 13 & 123		
30	1	Valve body 13		
	1	Valve body 21		
	1	Valve body 22		
	1	Valve body 57		
	1	Valve body 58		
00	1	Valve body 123		
32 □•0	1	Split bushing 21,22,57,58		
33	1	Retainer 21,22,57,58		
39	1	Tank ferrule 21 (not shown)		
	1	Tank ferrule 22,57,58 (not shown)		

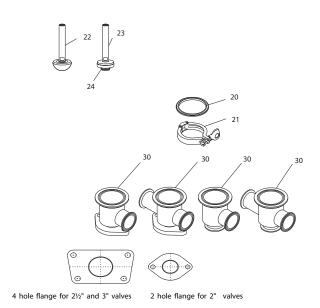
Service kits							
	Denomination	2"	2 1/2"	3"	4"		
Servic	ee kits 21, 22, 57, 58						
	Non TR Service Kits Buna	9613990381	9613990381	9613990384	9613990387		
	Non TR Service Kits EPDM	9613990382	9613990382	9613990385	9613990388		
	Non TR Service Kits SFY	9613990383	9613990383	9613990386	9613990389		
Servic	e kits 13, 123						
	TR Service Kit Buna	9613990369	9613990372	9613990375	9613990378		
	TR Service Kit EPDM		9613990373	9613990376	9613990379		
	TR Service Kit SFY	9613990371	9613990374	9613990377	9613990380		
Servic	ee kits 21, 22, 57, 58						
•	TR Service Kit Buna	9613990485	9613990488	9613990491	9613990494		
•	TR Service Kit EPDM		9613990489	9613990492	9613990495		
•	TR Service Kit SFY	9613990487	9613990490	9613990493	9613990496		
Servic	ee kits 13,123						
•	TR Service Kit Buna	9613990315	9613990318	9613990321	9613990324		
•	TR Service Kit EPDM	9613990316	9613990319	9613990322	9613990325		
•	TR Service Kit SFY	9613990317	9613990320	9613990323	9613990326		
Servic	e kits 21, 22, 57, 58						
0	TR2 Service Kit Buna	9613990533	9613990536	9613990539	9613990542		
0	TR2 Service Kit EPDM	9613990534	9613990537	9613990540	9613990543		
0	TR2 Service Kit SFY	9613990535	9613990538	9613990541	9613990544		
Servic	e kits 13, 123						
0	TR2 Service Kit Buna	9613990545	9613990548	9613990551	9613990554		
0	TR2 Service Kit EPDM		9613990549	9613990552	9613990555		
0	TR2 Service Kit SFY		9613990550	9613990553	9613990556		

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

## 4.7 762 Tangential Valve





#### Parts list

Pos	i.	Qty	Denomination
1L		1	Actuator long
1S		1	Actuator short
2A		1	Stem protector long 4"
2B		1	Stem protector ring 4"
2C		1	Stem protector spacer 4"
2L		1	Stem protector long
3L		1	Yoke long
4		2	Retainer
5	□♦○	2	V-packing
5A		2	O-ring to replace V-packing
6	□♦○	1	Packing retainer
7		1	End cap
8		1	Red capplug
9		1	Vent plug (not shown)
10		11	Lockwasher
11		7	Screw
12 13	□♦○	4	Screw O-ring stem BUNA
10	□♦○	1	O-ring stem EPDM
	□♦○	1	O-ring stem SFY
14	<b></b>	1	O-ring stern Si 1
15	□♦○	2	O-ring
16	<b>L</b> +0	1	O-ring
17	□♦○	2	Nylon lock pin
20		1	Gasket BUNA 13 & 123
	□•0	1	Gasket EPDM 13 & 123
21		1	Clamp
22		1	LP valve plug BUNA
		1	LP valve plug EPDM
		1	LP valve plug SFY
23		1	TR valve plug
		1	TR2 valve plug
24	<b>*</b>	1	TR stem seat
	0	1	TR2 stem seat
25		1	Bonnet
26	□♦○	1	Bushing
30		1	Valve body-47
		1	Valve body-48
		1	Valve body-49
		1	Valve body-50
		1	Valve body-51
		1	Valve body-52

#### Service kits

	Denomination	2"	2 1/2"	3"	4"
	Non TR Service Kit Buna	9613990369	9613990372	9613990375	9613990378
	Non TR Service Kit EPDM	9613990370	9613990373	9613990376	9613990379
	Non TR Service Kit SFY	9613990371	9613990374	9613990377	9613990380
•	TR Service Kit Buna	9613990315	9613990318	9613990321	9613990324
•	TR Service Kit EPDM	9613990316	9613990319	9613990322	9613990325
•	TR Service Kit SFY	9613990317	9613990320	9613990323	9613990326
0	TR2 Service Kit Buna	9613990521	9613990524	9613990527	9613990530
0	TR2 Service Kit EPDM	9613990522	9613990524	9613990528	9613990531
0	TR2 Service Kit SFY	9613990523	9613990525	9613990529	9613990532

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

# 12 4.8 771S Divert Valve 10 4"only 16 2B 2L or 2S 8 17 4 and 5A 1D 1Lor 1S 4 and 5A 6 3L or 3S \_ 10 - 11 (12 if 4") 10 32 \_33 - 13

#### Parts list

	ı	
Pos.	Qty	Denomination
1D	1	Diaphragm actuator
1S	1	10/20 actuator, short
2S	1	Stem protector, short
3S	1	Yoke, short
4	2	Seal retainer
5 🗆	2 2 2	Vee packing
5A		O-ring to replace v-packing
6 🗆	1	Packing retainer
7	1	End cap
8	1	Red caplug
9	11	Vent plug (not shown)
10	7	Lockwasher
11 12	4	Screw Screw
13 🗆	1	O-ring stem BUNA
	1	O-ring stem EPDM
	1	O-ring stem SFY
14	2	O-ring
15 🗆	1	O-ring
16	1	O-ring
17 🗆	1	Nylon lock pin
18	1	Body lower 2 ports clamp
10	2	Body lower 2 ports weld
19	1	Body lower 3 ports clamp
10	1	Body lower 3 ports weld
20 🗆	1	Body gasket BUNA
	1	Body gasket EPDM
	1	Body gasket SFY
21	1	Clamp
27	1	Valve plug
30	1	Body upper 2 ports clamp
	1	Body upper 2 ports weld
31	1	Body upper 3 ports clamp
<del>= :</del>	1	Body upper 3 ports weld
32 🗆	1	Stem bushing
33	1	Seal retaining washer
		Sea. Istalling Washer

#### Service kits

 Denomination	1 1/2"	2"	2 1/2"	3"	4"
Service Kit Buna	9613990327	9613990327	9613990508	9613990330	9613990333
Service Kit EPDM	9613990328	9613990328	9613990509	9613990331	9613990334
Service Kit SFY	9613990329	9613990329	9613990510	9613990332	9613990335

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

# 4.9 771S Reverse-Acting Valve 4"only 2L or 2S 8 0-4 and 5A 1D 1Lor 1S 4 and 5A 3Lor 3S 10 - 11 (12 if 4") 10 32 - 13

18A<sup>2</sup>

#### Parts list

Pos.	Qty	Denomination
1D	1	Diaphragm actuator
1S	1	10/20 actuator, shor
2S	1	Stem protector, short
3S	1	Yoke,short
4	2	Seal retainer
5 🗆	2 2 2	Vee packing
5A		O-ring to replace v-packing
6 🗆	1	Packing retainer
7	1	End cap
8	1	Red caplug
9	1	Vent plug (not shown)
10	11	Lockwasher
11 12	7 4	Screw
13 🗆	1	Screw O-ring stem BUNA
	1	O-ring stem EPDM
	1	O-ring stem SFY
14	1	O-ring
15 🗆	2	O-ring
16	1	O-ring
17 🗆	1	Nylon lock pin
18A	1	Body lower 2 ports clamp
	1	Body lower 2 ports weld
20 🗆	1	Body gasket BUNA
	1	Body gasket EPDM
	1	Body gasket SFY
21	1	Clamp
30	1	Body upper 2 ports clamp
	1	Body upper 2 ports weld
31	1	Body upper 3 ports clamp
	1	Body upper 3 ports weld
32 🗆	1	Stem bushing
33	1	Seal retaining washer
34	1	Valve plug

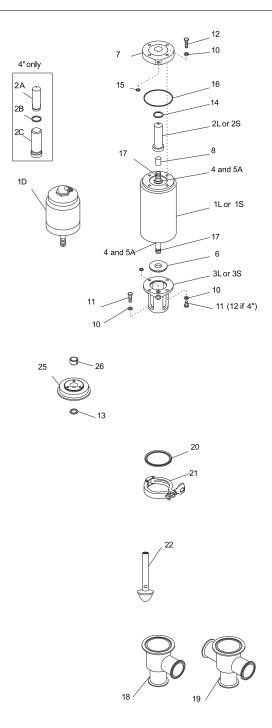
#### Service kits

 Denomination	1 1/2"	2"	2 1/2"	3"	4"
Service Kit Buna	9613990327	9613990327	9613990508	9613990330	9613990333
Service Kit EPDM	9613990328	9613990328	9613990509	9613990331	9613990334
Service Kit SFY	9613990329	9613990329	9613990510	9613990332	9613990335

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.10 771S Throttling Valve



#### Parts list

Pos.	Qty	Denomination
	1	Positioner & adapter 14p
	1	Positioner & adapter 24p
1D	1	Diaphragm actuator 15
1S	1	Actuator 10/20
10	1	Actuator 14d
2S	1	Stem protector, short
3S	1	Yoke,short
4	2	Seal retainer
5 🗆	2	Vee packing
5A	2	O-ring to replace v-packing
6 🗆	1	Packing retainer
7	1	End cap
8	1	Red caplug
9	1	Vent plug (not shown)
10	11	Lockwasher
11	7	Screw
12	4	Screw
13 🗆	1	O-ring stem BUNA
		O-ring stem EPDM
_	1	O-ring stem SFY
14	1	O-ring
15 🗆	2	O-ring
16	1	O-ring
17 🗆	1	Nylon lock pi
18	1	Body lower 2 ports clamp
	1	Body lower 2 ports weld
19	2	Body lower 3 ports clamp
	1	Body lower 3 ports weld
20 🗆	1	Body gasket BUNA
	1	Body gasket EPDM
	1	Body gasket SFY
21	1	Clamp
22S	1	Stem assembly 10/20/24p
	1	Stem assembly 15/14d
	1	Stem assembly 14p
	1	Special Taper
25	1	Bonnet
26 🗆	1	Stem bushing

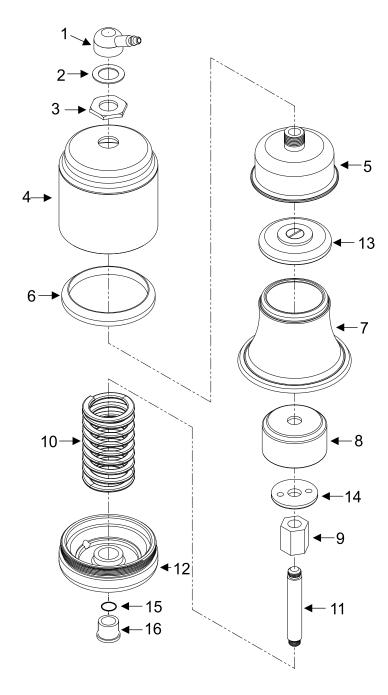
#### Service kits

 Denomination	1"	1 1/2"	2"	2 1/2"	3"	4"
Service Kit Buna	9613990336	9613990339	9613990342	9613990345	9613990348	9613990351
Service Kit EPDM	9613990337	9613990340	9613990343	9613990346	9613990349	9613990352
Service Kit SFY	9613990338	9613990341	9613990344	9613990347	9613990350	9613990353

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.11 Type 15 25 Valve Actuators



Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### Parts list

Pos.	Qty	Denomination
1	1	Coupler
2 🗆	1	Gasket
3	1	Sealing nut
4	1	Cylinder
5	1	Outer diaphragm clamp
6	1	Body insert
7 🗆	1	Diaphragm
8	1	Inner diaphragm clamp
9	1	Adapter
10	1	Spring
11	1	Stem
12	1	Bonnet
13	1	Diaphragm guide
14	1	Nut
15 🗆	1	Packing
16 🗆	1	Seal retainer

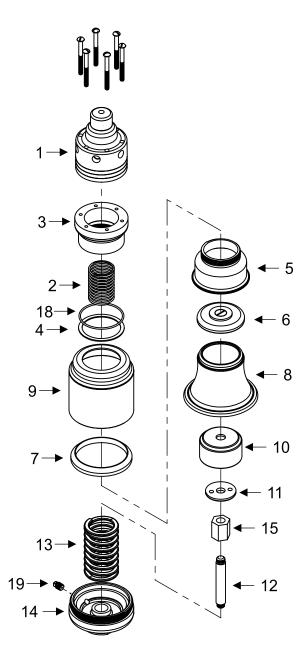
#### Service kits

#### Denomination

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.12 Diaphragm Actuators with Siemens Positioner 771S Series 1"



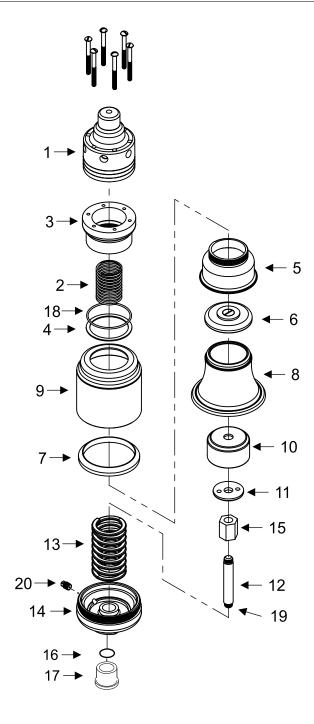
### Parts list

Pos.	Qty	Denomination
1	1	Moore Positioner
2	1	Range Spring
3	1	Mounting Adapter
4	1	Gasket
5	1	Outer Diaphragm Clamp
6	1	Inner Diaphragm Clamp
7	1	Body Insert
8	1	Diaphragm
9	1	Actuator Cylinder
10	1	Inner Diaphragm Guide
11	1	Nut
12	1	Stem
13	1	Spring
14	1	Bonnet
15	1	Adapter
16	1	Packing
17	1	Seal Retainer
18	1	O-Ring
19	1	Vented plug

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.13 Diaphragm Actuators with Siemens Positioner 771 1-1/2" to 3" Valves



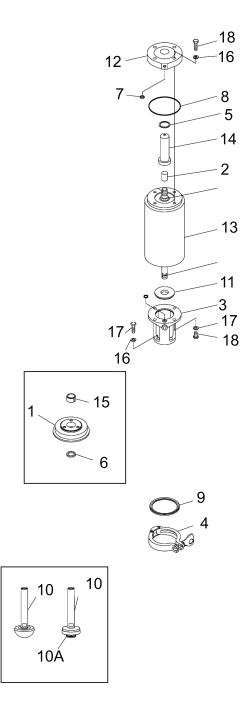
### Parts list

Pos.	Qty	Denomination
1	1	Moore Positioner
2	1	Range Spring
3	1	Mounting Adapter
4	1	Gasket
5	1	Outer Diaphragm Clamp
6	1	Inner Diaphragm Clamp
7	1	Body Insert
8	1	Diaphragm
9	1	Actuator Cylinder
10	1	Inner Diaphragm Guide
11	1	Nut
12	1	Stem
13	1	Spring
14	1	Bonnet
15	1	Adapter
16	1	Packing
17	1	Seal Retainer
18	1	O-Ring
19	1	Thread Lock
20	1	Vented plug

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.14 736-X Swap Valve Short Stroke Stems



#### Parts list

Pos.	Qty	Denomination
1	1	ADAPTER BONNET -761 TO 361
2 3	1	CAPLUG#5/8
3	1	YOKE
4	1	BODY CLAMP
5	1	O-RING USF
6 🗖	1	STEM O-RING BUNA
0	1	STEM O-RING EPDM
7	1 2	STEM O-RING SFY O-RING USF
8	1	O-RING USF O-RING USF
9 🗆		BODY GASKET BUNA
9 ⊔	1 1	BODY GASKET EPDM
0	li	BODY GASKET EFDIN
10	1	LP STEM-USF
. 0	1	LP STEM-ESF
	1	LP STEM-SFY
	1	LP STEM-ESF
	1	LP STEM-SFY
11	li	PACKING GLAND
12	1	PLASTIC DOME
13	1	ACTUATOR
14	1	STEM PROTECTOR
15 □•0	1	STEM BUSHING
16	11	LOCKWASHER
17	7	SCREW
18	4	SCREW
19	1	VENTED PLUG

#### Service kits

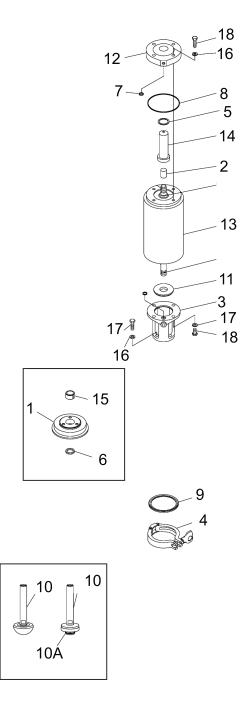
#### Denomination

	Service Kit Buna	9613990662	9613990665	9613990668
•	Service Kit EPDM	9613990663	9613990666	9613990669
0	Service Kit SFY	9613990664	9613990667	9613990670

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.15 736-X Swap Valve Long Stroke Stems



#### Parts list

Pos.	Qty	Denomination
1 2 3 4 4 5 6 0 0 7 8 9 0 0 10 10A 0 0 0 11 12 13 14 15 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADAPTER BONNET -761 TO 361 CAPLUG#5/8 YOKE BODY CLAMP O-RING USF STEM O-RING BUNA STEM O-RING EPDM STEM O-RING SFY O-RING USF O-RING USF O-RING USF BODY GASKET BUNA BODY GASKET EPDM BODY GASKET SFY TR STEM COMPLETE TR SEAT ONLY PACKING GLAND PLASTIC DOME ACTUATOR STEM PROTECTOR STEM BUSHING
16 17 18 19	11 7 4 1	LOCKWASHER SCREW SCREW VENTED PLUG

#### Service kits

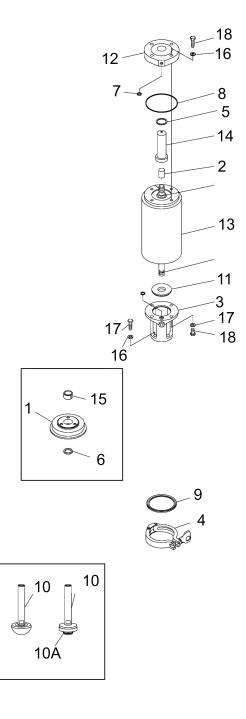
#### Denomination

	Service Kit Buna	9613990671	9613990674	9613990677
•	Service Kit EPDM	9613990672	9613990675	9613990678
0	Service Kit SFY	9613990673	9613990676	9613990679

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.16 736TR-X Swap Valve Short Stroke Stems



#### Parts list

Pos.	Qty	Denomination
1 2 3 4 5 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADAPTER BONNET -761 TO 361 CAPLUG#5/8 YOKE BODY CLAMP O-RING USF STEM O-RING BUNA STEM O-RING EPDM STEM O-RING SFY O-RING USF O-RING USF BODY GASKET BUNA BODY GASKET EPDM BODY GASKET SFY LP STEM-USF TR SEAT ONLY PACKING GLAND PLASTIC DOME ACTUATOR STEM PROTECTOR STEM BUSHING LOCKWASHER
17 18 19	7 4 1	SCREW SCREW VENTED PLUG

#### Service kits

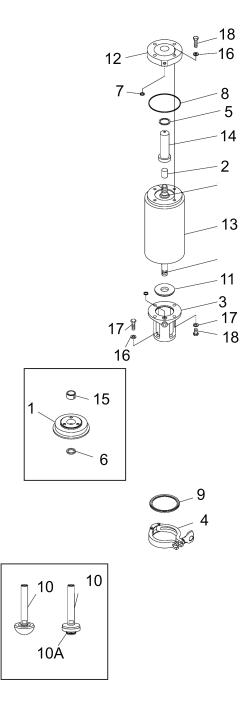
#### Denomination

	Service Kit Buna	9613990671	9613990674	9613990677
•	Service Kit EPDM	9613990672	9613990675	9613990678
0	Service Kit SFY	9613990673	9613990676	9613990679

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.17 736TR-X Swap Valve Long Stroke Stems



#### Parts list

Pos.	Qty	Denomination
1 2 3 4 4 5 6 0 0 7 8 9 0 0 10 10A 0 0 0 11 12 13 14 15 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADAPTER BONNET -761 TO 361 CAPLUG#5/8 YOKE BODY CLAMP O-RING USF STEM O-RING BUNA STEM O-RING EPDM STEM O-RING SFY O-RING USF O-RING USF O-RING USF BODY GASKET BUNA BODY GASKET EPDM BODY GASKET SFY TR STEM COMPLETE TR SEAT ONLY PACKING GLAND PLASTIC DOME ACTUATOR STEM PROTECTOR STEM BUSHING
16 17 18 19	11 7 4 1	LOCKWASHER SCREW SCREW VENTED PLUG

#### Service kits

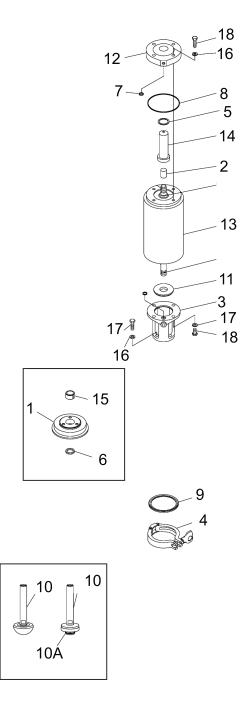
#### Denomination

	Service Kit Buna	9613990671	9613990674	9613990677
•	Service Kit EPDM	9613990672	9613990675	9613990678
0	Service Kit SFY	9613990673	9613990676	9613990679

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.18 736TR2-X Swap Valve Short Stroke Stems



#### Parts list

Pos.	Qty	Denomination
POS.  1 2 3 4 5 6 0 7 8 9 0 10 10A 10A 10A 11 12 13 14 15 16	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADAPTER BONNET -761 TO 361 CAPLUG#5/8 YOKE BODY CLAMP O-RING USF STEM O-RING BUNA STEM O-RING EPDM STEM O-RING SFY O-RING USF O-RING USF O-RING USF O-RING USF DOY GASKET BUNA BODY GASKET EPDM BODY GASKET SFY TR2 STEM COMPLETE TR SEAT ONLY PACKING GLAND PLASTIC DOME ACTUATOR STEM PROTECTOR STEM BUSHING LOCKWASHER
17 18 19	7 4 1	SCREW SCREW VENTED PLUG

#### Service kits

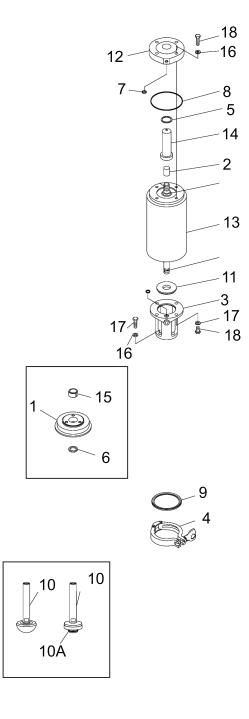
#### Denomination

	Service Kit Buna	9613990680	9613990683	9613990686
•	Service Kit EPDM	9613990681	9613990684	9613990687
0	Service Kit SFY	9613990682	9613990685	9613990688

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 4.19 736TR2-X Swap Valve Long Stroke Stems



#### Parts list

Pos.	Qty	Denomination
Pos.  1 2 3 4 5 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADAPTER BONNET -761 TO 361 CAPLUG#5/8 YOKE BODY CLAMP O-RING USF STEM O-RING BUNA STEM O-RING EPDM STEM O-RING SFY O-RING USF O-RING USF O-RING USF BODY GASKET BUNA BODY GASKET EPDM BODY GASKET SFY TR2 STEM COMPLETE TR SEAT ONLY PACKING GLAND PLASTIC DOME ACTUATOR STEM PROTECTOR STEM BUSHING
16 17 18 19	7 4 1	LOCKWASHER SCREW SCREW VENTED PLUG

#### Service kits

#### Denomination

	Service Kit Buna	9613990680	9613990683	9613990686
•	Service Kit EPDM	9613990681	9613990684	9613990687
0	Service Kit SFY	9613990682	9613990685	9613990688

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 5.1 Tank and Kettle Valve Flange, Ferrule, Tank Pods Dimensions and Part Numbers

Ferrule Part Numbers Valve Model Valve Only-Less Ferrule Ferrule 32-82-3 762-20-2" & 2.5" 762-21-Size 32-82-4 762-20-3" & 4" 32-84-3 762-20-2" & 2.5" 762-31-Size 32-84-4 762-20-3" & 4" 32-121 762-28-2" & 2.5" & 3" 762-29-Size 32-180 762-28-4" 762-55-2" & 2.5" 32-154 762-57-Size 32-595 762-20-3" & 4" 32-154 762-56-2" & 2.5" 762-58-Size 762-56-3" & 4" 32-595 32-84-3 762-24-2" & 2.5" 762-35-Size 32-84-4 762-24-3" & 4" 762-32-2" & 2.5" & 3" 32-121 762-33-Size

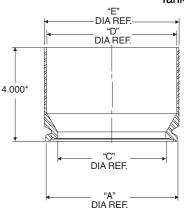
32-180

762-32-4"

Always use Alfa Laval genuine spare parts.

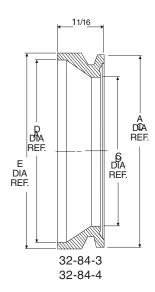
The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### Tank Pods for Kettle Valves Dimensions



\*4" length is standard. Other lengths available per customer requirement. 32-82-3

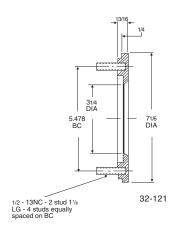
32-82-3 32-82-4

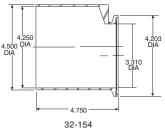


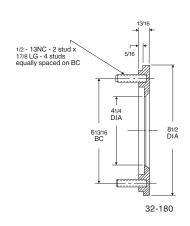
Always use Alfa Laval genuine spare parts.

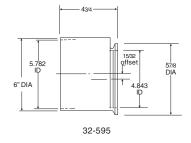
The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

Valve Size (in)	A	Size 32-82 and 32-84 C	D	E
vaive Size (iii)	in	in	in	in
3	4.20	3.31	4.25	4.50
4	5.87	4.84	5.78	6.00









Always use Alfa Laval genuine spare parts.

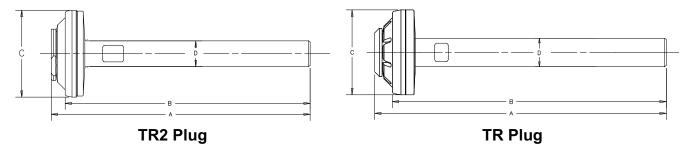
The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### 5.2 Actuators

#### Parts list

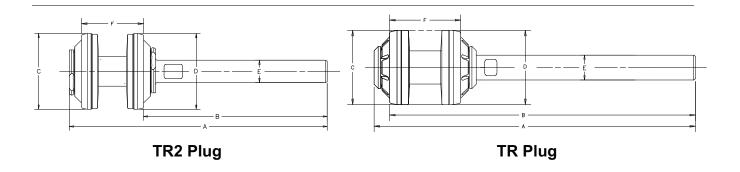
Pos.	Qty	Denomination

#### 5.3 761/741 TR Shut-Off TR/TR2 Stems

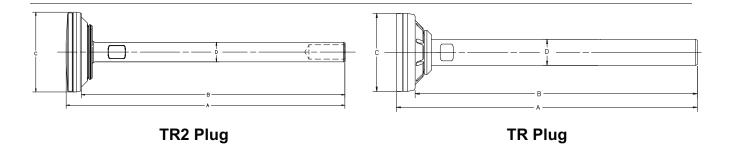


Dimensions are approximate and are intended to aid in identification only. For more information, contact Alfa Laval, Inc.

Series	Size	Part Number (19TR/TR2)	Α	В	С	D
761	1 1/2	19TR-1254-1 1/2-316L	5 3/4	5 3/16	1 1/2	3/4
761	2	19TR-1254-2-316L	5 21/32	5 3/16	2 1/16	3/4
761	2 1/2	19TR-1254-2 1/2-316L	5 27/32	5 3/8	2 35/32	3/4
761	3	19TR-1254-3-316L	6 11/32	5 7/8	3 1/16	3/4
761	4	19TR-1254-4-316L	8 17/64	7 13/16	4 1/16	3/4
761	4	19TR-1254A-4-316L	9 3/4	9 19/64	4 1/16	7/8
761	2	19TR-1300-2-316L	5 61/64	5 31/64	2 1/16	3/4
761	2 1/2	19TR-1300-2 1/2-316L	6 29/64	5 63/64	2 17/64	3/4
761	3	19TR-1300-3-316L	6 61/64	6 31/64	3 1/16	3/4
761	1 1/2	19TR-1308-1 1/2-316L	6 29/32	5 7/16	2 1/4	3/4
761	2	19TR-1308-2-316L	7 17/64	7 51/64	2 7/16	3/4
761	2 1/2	19TR-1308-2 1/2-316L	7 39/64	7 9/64	3 23/32	3/4
761	3	19TR-1308-3-316L	8 11/16	8 7/32	4 15/32	3/4
761	4	19TR-1308A-4-316L	12	11 9/16	5 7/8	7/8



Series	Size	Part Number (19TR/TR2)	Α	В	С	D	Е	F
761	1 1/2	19TR-1276-1 1/2-316L	9 5/16	5 3/16	1 1/2	2 1/16	3/4	2 17/64
761	2	19TR-1276-2-316L	9 1/4	8 3/4	2 1/16	2 1/16	3/4	2 17/64
761	2 1/2	19TR-1276-2 1/2-316L	10 3/32	9 5/8	2 35/64	2 35/64	3/4	2 29/64
761	3	19TR-1276-3-316L	11 7/64	10 5/8	3 1/6	3 1/16	3/4	3
761LS	1 1/2	19TR-1255-1 1/2-316L	9 19/64	8 47/64	1 1/2	2 1/16	3/4	1 33/64
761LS	2	19TR-1255-2-316L	9 13/64	8 47/64	2 1/16	2 1/16	3/4	1 7/16
761LS	2 1/2	19TR-1255-2 1/2-316L	10 1/16	9 39/64	2 35/64	2 35/64	3/4	1 5/8
761LS	3	19TR-1255-3-316L	11 5/64	10 39/64	3 1/16	3 1/16	3/4	2 1/8
761LS	4	19TR-1255-4-316L	14 29/32	14 11/32	4 1/16	4 1/16	3/4	2 9/32
761LS	4	19TR-1255A-4-316L	15 1/32	14 9/6	4 1/16	4 1/16	7/8	1 7/64

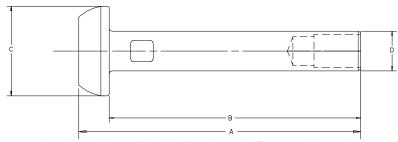


Series	Size	Part Number (19TR/TR2)	Α	В	С	D
761	2	19TR-1306-2-316L	6 59/64	6 15/32	2 1/16	3/4
761	2 1/2	19TR-1306-2 1/12-316L	7 19/32	7 1/16	2 35/64	3/4
761	3	19TR-1306-3-316L	8 3/32	7 37/64	3 1/16	3/4

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### 5.4 700/800 LP Shut-Off Stems



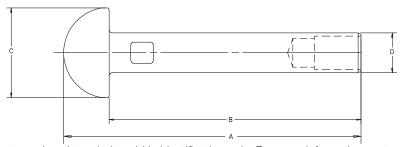
Dimensions are approximate and are intended to aid in identification only. For more information, contact Alfa Laval, Inc.

Series	Size	Part Number	Α	В	С	D
761	1 1/2	19LP-1254-1 1/2-316L	5 19/64	4 23/32	1 11/16	3/4
761	2	19LP-1254-2-316L	5 13/32	4 47/65	2 13/64	3/4
761	2 1/2	19LP-1254-2 1/2-316L	5 5/8	4 15/16	2 23/32	3/4
761	3	19LP-1254-3-316L	6 1/8	5 7/16	3 7/32	3/4
761	4	19LP-1295A-4-316L	9 31/64	8 13/16	4 7/32	3/4
861	1 1/2	19LP-1336-1 1/2-316L	6 35/64	5 31/32	1 11/16	3/4
861	2	19LP-1336-2-316L	6 21/64	5 31/32	2 13/64	3/4
861	2 1/2	19LP-1336-2 1/2-316L	6 55/64	6 3/16	2 23/32	3/4
861	3	19LP-1336-3-316L	7 3/8	6 11/16	3 7/32	3/4
861	4	19LP-1426-4-316L	10 25/32	10 3/32	4 7/32	7/8
762	2	19LP-1300-2-316L	5 23/32	5 1/32	2 13/64	3/4
762	2 1/2	19LP-1300-2 1/2-316L	6 7/32	5 13/32	2 23/32	3/4
762	3	19LP-1300-3-316L	6 23/32	6 1/32	3 7/32	3/4
762	4	19LP-1436-3-316L	8 27/32	8 11/64	4 7/32	7/8

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 5.5 700/800 Spherical Shut-Off Stems (replaced by "LP" stems)



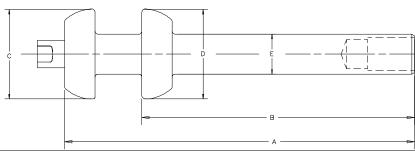
Dimensions are approximate and are intended to aid in identification only. For more information, contact Alfa Laval, Inc.

Series	Size	Part Number	Α	В	С	D
761	1 1/2	19-1254-1 1/2-316L	5 29/64	4 23/32	1 11/16	3/4
761	2	19-1254-2-316L	5 3/4	4 37/65	2 9/32	3/4
761	2 1/2	19-1254-2 1/2-316L	6 3/32	4 5/8	2 55/64	3/4
761	3	19-1254-3-316L	6 27/32	5 1/16	3 13/32	3/4
761	4	19-1254-4-316L	7 25/32	6 29/32	4 13/32	3/4
761	4	19-1254A-4-316L	9 17/32	8 5/8	4 13/32	7/8
861	1 1/2	19-1336-1 1/2-316L	6 55/64	5 31/32	1 11/16	3/4
861	2	19-1336-2-316L	7	5 53/64	2 9/32	3/4
861	2 1/2	19-1336-2 1/2-316L	7 11/32	5 43/64	2 55/32	3/4
861	3	19-1336-3-316L	8 3/32	6 5/16	3 13/32	3/4
762	2	19-1300-2-316L	6 1/16	4 3/4	2 9/32	3/4
762	2 1/2	19-1300-2 1/2-316L	6 45/64	5 1/4	2 55/64	3/4
762	3	19-1300-3-316L	7 29/64	6 21/32	3 13/32	3/4

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 5.6 700/800 Spherical Stems (Replaced by "LP" stems)



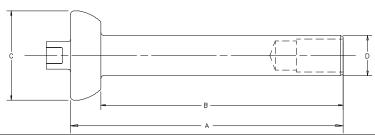
Series	Size	Part Number	Α	В	С	D	E
761	1 1/2	19-1276-1 1/2-316L	8 55/64	6 29/32	1 11/16	2 13/64	3/4
761	2	19-1276-2-316L	8 31/32	6 29/32	2 13/64	2 13/64	3/4
761	2 1/2	19-1276-2 1/2-316L	9 55/64	7 19/32	2 23/32	2 23/32	3/4
761	3	19-1276-3-316L	10 55/64	8 5/64	3 7/32	3 7/32	3/4
861	1 1/2	19-1384-1 1/2-316L	10 7/64	8 11/64	1 11/16	2 13/64	3/4
861	2	19-1384-2-316L	10 7/32	8 11/64	2 13/64	2 13/64	3/4
861	2 1/2	19-1384-2 1/2-316L	11 7/64	8 53/64	2 23/32	2 23/32	3/4
861	3	19-1384-3-316L	12 7/64	9 21/64	3 7/32	3 7/32	3/4

Always use Alfa Laval genuine spare parts.
The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### 700 RA "LP" Stems 5.7



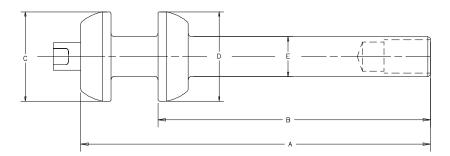
Series	Size	Part Number	Α	В	С	D
761	2	19-1306-2-316L	6 59/64	6 15/32	2 13/64	3/4
761	2 1/2	19-1306-2 1/12-316L	7 19/32	6 29/32	2 23/32	3/4
761	3	19-1306-3-316L	8 3/32	7 13/32	3 7/32	3/4
761	4	19-1429-4-316L	14 13/32	12 59/64	4 7/32	7/8

Always use Alfa Laval genuine spare parts.
The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### 700/800 LP Divert Stems 5.8

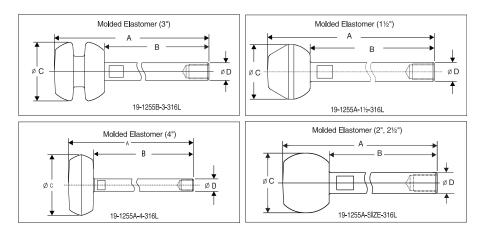


Series	Size	Part Number	Α	В	С	D	E
761	1 1/2	19-1276-1 1/2-316L	8 55/64	6 29/32	1 11/16	2 13/64	3/4
761	2	19-1276-2-316L	8 31/32	6 29/32	2 13/64	2 13/64	3/4
761	2 1/2	19-1276-2 1/2-316L	9 55/64	7 19/32	2 23/32	2 23/32	3/4
761	3	19-1276-3-316L	10 55/64	8 5/64	3 7/32	3 7/32	3/4
861	1 1/2	19-1384-1 1/2-316L	10 7/64	8 11/64	1 11/16	2 13/64	3/4
861	2	19-1384-2-316L	10 7/32	8 11/64	2 13/64	2 13/64	3/4
861	2 1/2	19-1384-2 1/2-316L	11 7/64	8 53/64	2 23/32	2 23/32	3/4
861	3	19-1384-3-316L	12 7/64	9 21/64	3 7/32	3 7/32	3/4

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

### 5.9 761/741 Spherical Divert LS (Long Stroke) Stems



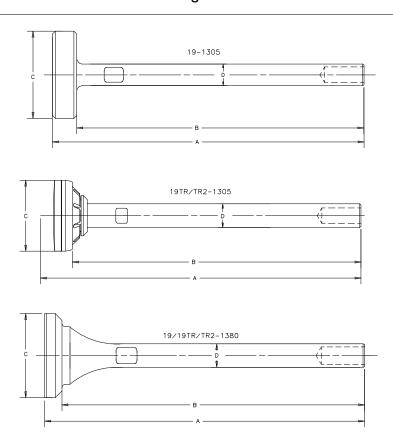
Dimensions are approximate and are intended to aid in identification only. For more information, contact Alfa Laval, Inc.

Valve	Size	Part Number	,	4	Е	3	С		С	)
in	mm	rait Number	in	mm	in	mm	in	mm	in	mm
1 1/2	38.1	19-1255A-1½-316L	9 3/16	233.4	7 1/8	181	2 1/4	57.2	3/4	19
2	50.8	19-1255A-2-316L	9	228.6	7	177.8	2 1/4	57.2	3/4	19
2 1/2	63.5	19-1255A-2½-316L	10	254	7 3/4	196.9	2 15/16	58.7	3/4	19
3	76.2	19-1255B-3-316L	11	279.4	8 1/16	204.8	3 3/8	85.7	3/4	19
4	101.6	19-1255A-4-316L	14 7/8	377.8	13 1/16	332	4 7/16	112.7	7/8	22.2

Always use Alfa Laval genuine spare parts.

The warranty of Alfa Laval products is dependent on the use of Alfa Laval genuine spare parts.

#### 5.10 Bonded TR & TR2 Kettle/Tank Outlet/Tangential Valve Stems



Dimensions are approximate and are intended to aid in identification only. For more information, contact Alfa Laval, Inc.

Series	Size	Part Number	Α	В	С	D
762	2	19-1305-2-316L	9 3/8	8 5/8	2 1/16	3/4
762	2 1/2	13-1305-2 1/2-316L	10 1/16	9 5/16	2 9/16	3/4
762	3	19-1305-3-316L	10 11/16	9 15/16	3 1/16	3/4
762	4	19-1305-4-316L	12 17/64	11 33/64	4 1/16	3/4
762	4	19-1380-4-316L	12 1/8	11 11/32	4 1/16	7/8
762	2	19TR-1305-2-316L	9 3/8	8 13/16	2 1/16	3/4
762	2 1/2	19TR-1305-2 1/2-316L	10 1/16	4 15/32	2 9/16	3/4
762	3	19TR-1305-3-316L	10 21/32	10 1/16	3 1/16	3/4
762	4	19TR-1380-4-316L	12 1/8	11 9/16	4 1/16	7/8
762	2 1/2	19TR2-1305-2 1/2-316L	12 1/16	9 31/64	2 9/16	3/4
762	3	19TR2-1305-3-316L	10 21/32	10 1/16	3 1/16	3/4
762	4	19TR2-1380-3-316L	12 1/4	11 5/16	4 1/16	7/8

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