

## 3.2 Control

The valve control & indication are designed to provide easy and fully technical solutions in any process area. The requirements for total product flexibility and reliability, together with superior performance, are key functions for success within processing areas.



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# Leave Surveillance to the Top

## Alfa Laval ThinkTop® Digital

**Concept**

The ThinkTop® is a uniform modular control unit that consists of a proven no-touch, set-and-forget sensor system with light-emitting diodes (LEDs), solenoid valves and valve control sensor board for connection to any PLC (Programming Logic Controller) system with one of the three interfaces; Digital, AS-Interface and DeviceNet. ThinkTop is offering a solution that utilizes all the features available on Alfa Laval butterfly, single-seat and Mixproof valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability.

**Working principle**

The ThinkTop is an automated control unit that can be fitted with up to three solenoid valves and who convert the electrical PLC and sensor signals into mechanical energy to open or close the air-operated valve, using the physical stimulus of an indication pin mounted on the valve stem. ThinkTop fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. To initiate manual setup, simply press the push-button startup sequence. Or set up without dismantling the control head using the optional IR keypad for remote control.



**TECHNICAL DATA**

**Communication**

Interface . . . . . Digital PNP/NPN  
 Supply voltage . . . . . 24 ± 10% VDC

**Sensor board**

Max current consumption . . . . . 45mA  
 Feedback signal #1 . . . . . Closed valve  
 Feedback signal #2 . . . . . Open valve  
 Feedback signal #3 . . . . . Seat-lift 1  
 Feedback signal #4 . . . . . Seat-lift 2  
 Feedback signal #5 . . . . . Status  
 Valve tolerance band options . . . . . 5  
 Default tolerance band . . . . . ± 5 mm  
 Sensor accuracy . . . . . ± 0.1 mm  
 Stroke length . . . . . 0.1 - 80 mm

**Solenoid valve**

Max current consumption . . . . . 45mA  
 Air supply . . . . . 300-900 kPa (3-9 bar)  
 Type of solenoids . . . . . 3/2-ways or 5/2-ways  
 Numbers of solenoids . . . . . 0-3  
 Manual hold override . . . . . Yes  
 Throttle, Air in/out 1A, 1B . . . . . 0-100 %  
 Push-in fittings . . . . . ø6 mm or 1/4"



**PHYSICAL DATA**

**Materials**

Steel parts . . . . . Stainless steel and Brass  
 Plastic parts . . . . . Blue Nylon PA 12  
 Seals . . . . . Nitrile (NBR) rubber

**Environment**

Working temperature . . . . . -20 °C to +85 °C  
 Protection class . . . . . IP66 and IP67  
 Protection class equivalent . . . . . NEMA 4.4x and 6P

**Cable connection**

Main cable gland . . . . . PG11 (4-10 mm)  
 Max wire size . . . . . 0.75 mm<sup>2</sup> (AWG 19)  
 Optional cable gland . . . . . PG7 (4 - 6.8 mm)

**Note!**

For further information: See also ESE00353

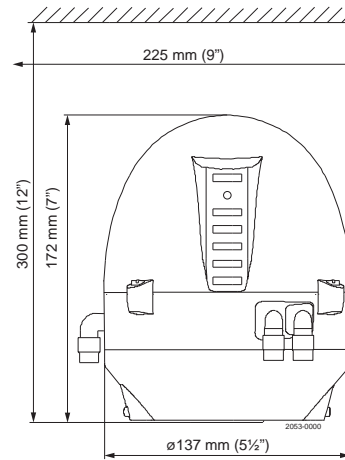
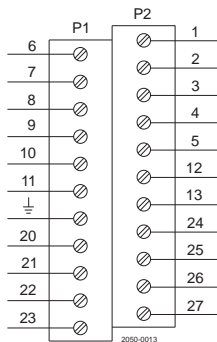
The ThinkTop has Patented Sensor System, Registered Design and Registered Trademark owned by Alfa Laval

**Options**

- Solenoid valve configuration
- Pneumatic tubing interface

**Accessories**

- Remote programming (IR keypad)
- For upper seat-lift detection on Mixproof valves:
  - External PNP sensors (Refer to Brackets and Inductive Sensores)
  - Cable gland PG7
  - External sensor bracket (Refer to Brackets and Inductive Sensores)
- Various cable options
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Special indication pin for Unique SSV-LS, Unique SSV High Pressure valves
- Adaptor for Unique SSSV valves

**Dimensions****Electrical connection**

6	Solenoid 1	1	Closed valve
7	Solenoid 2	2	Open valve
8	Solenoid 3	3	Seat-lift 1
9	Supply +	4	Seat-lift 2
10	Supply -	5	Status
11	Solenoid com	12	NPN/PNP Jumper
Earth	Earth	13	NPN/PNP Jumper
20	Solenoid common grey	24	Seat-lift 1 "upper"
21	Solenoid 1, grey	25	Seat-lift 2 "lower"
22	Solenoid 2, grey	26	Supply +
23	Solenoid 3, grey	27	Supply -

# Leave Surveillance to the Top

## Alfa Laval ThinkTop® AS-Interface

### Concept

The ThinkTop® is a uniform modular control unit that consists of a proven no-touch, set-and-forget sensor system with light-emitting diodes (LEDs), solenoid valves and valve control sensor board for connection to any PLC (Programming Logic Controller) system with one of the three interfaces; Digital, AS-Interface and DeviceNet. ThinkTop is offering a solution that utilizes all the features available on Alfa Laval butterfly, single-seat and Mixproof valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability.

### Working principle

ThinkTop is an automated control unit that can be fitted with up to three solenoid valves and who convert the electrical PLC and sensor signals into mechanical energy to open or close the air-operated valve, using the physical stimulus of an indication pin mounted on the valve stem. ThinkTop fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. To initiate manual setup, simply press the push-button startup sequence. Or set up without dismantling the control head using the optional IR keypad for remote control.



### TECHNICAL DATA

#### Communication

Interface option 1	AS-Interface v2.1, 31 node
Supply voltage	29.5V - 31.6 VDC
Slave profile	7.F.F.F
Default slave address	0
Interface option 2	AS-Interface v3.0, 62 node
Supply voltage	29.5V - 31.6 VDC
Slave profile	7.A.7.7
Default slave address	0

#### Sensor board

Max current consumption	45mA
Feedback signal #1	Closed valve
Feedback signal #2	Open valve
Feedback signal #3	Seat-lift 1
Feedback signal #4	Seat-lift 2
Feedback signal #5	Status
Valve tolerance band options	5
Default tolerance band	± 5 mm
Sensor accuracy	±0.1 mm
Stroke length	0.1 - 80 mm

#### Solenoid valve

Max current consumption	45mA
Air supply	300-900 kPa (3-9 bar)
Type of solenoids	3/2-ways or 5/2-ways
Numbers of solenoids	0-3
Manual hold override	Yes
Throttle air in/out 1A, 1B	0-100 %
Push-in fittings	ø6 mm or 1/4"

### PHYSICAL DATA

#### Materials

Steel parts	Stainless steel and Brass
Plastic parts	Blue Nylon PA 12
Seals	Nitrile (NBR) rubber

#### Environment

Working temperature	-20 °C to +85 °C
Protection class	IP66 and IP67
Protection class equivalent	NEMA 4.4x and 6P

#### Cable connection

Main cable gland	PG11 (4 - 10 mm)
Optional main M12 plug	2 wire (A coded)
Max wire size	0.75 mm <sup>2</sup> (AWG 19)
Optional cable gland	PG7 (4 - 6,8 mm)

#### Note!

For further information: See also ESE00356

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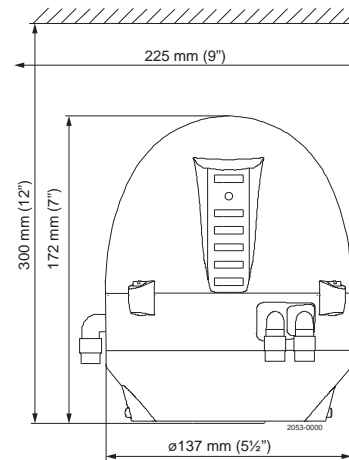
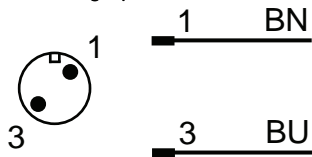


**Options**

- Communication interface
- Solenoid valve configurator
- Pneumatic tubing interface
- Main cable connection

**Accessories**

- Remote programming (IR keypad)
- For upper seat-lift detection on Mixproof valves:
  - External PNP sensors (Refer to Brackets and Inductive Sensors)
  - Cable gland PG7
  - External sensor bracket (Refer to Brackets and Inductive Sensors)
- Various cable options
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Special indication pin for Unique SSV-LS, Unique SSV High Pressure valves
- Adaptor for Unique SSSV valves

**Dimensions****Electrical connection****M12 Plug option****AS-Interface bits assignment**

For AS-interface version with 31 and 62 node, the following bit assignment can be used.

DI0	Feedback #1 Closed valve
DI1	Feedback #2 Open valve
DI2	Feedback #3-4 Seatlift 1 or Seatlift 2
DI3	Feedback #5 Status
DO0	Out #1 Not connected
DO1	Out #2 Solenoid valve 1
DO2	Out #3 Solenoid valve 2
DO3	Out #4 Solenoid valve 3

## Leave Surveillance to the Top

### Alfa Laval ThinkTop® DeviceNet™

#### Concept

The ThinkTop® is a uniform modular control unit that consists of a proven no-touch, set-and-forget sensor system with light-emitting diodes (LEDs), solenoid valves and valve control sensor board for connection to any PLC (Programming Logic Controller) system with one of the three interfaces; Digital, AS-Interface and DeviceNet. ThinkTop is offering a solution that utilizes all the features available on Alfa Laval butterfly, single-seat and Mixproof valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability .

#### Working principle

ThinkTop is an automated control unit that can be fitted with up to three solenoid valves and who convert the electrical PLC and sensor signals into mechanical energy to open or close the air-operated valve, using the physical stimulus of an indication pin mounted on the valve stem. ThinkTop fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. To initiate manual setup, simply press the push-button startup sequence. Or set up without dismantling the control head using the optional IR keypad for remote control.



#### TECHNICAL DATA

##### Communication

Interface	DeviceNet
Supply voltage	11 - 25 VDC
Class 4 messaging	2 byte Polling
Baud rates	125K, 250K, 500K
Default slave address	63

##### Sensor board

Max current consumption	45mA
Feedback signal #1	Closed valve
Feedback signal #2	Open valve
Feedback signal #3	Seat-lift 1
Feedback signal #4	Seat-lift 2
Feedback signal #5	Status
Valve tolerance band options	5
Default tolerance band	± 5 mm
Sensor accuracy	±0.1 mm
Stroke length	0.1 - 80 mm

##### Solenoid valve

Max current consumption	45mA
Air supply	300-900 kPa (3-9 bar)
Type of solenoids	3/2-ways or 5/2-ways
Numbers of solenoids	0-3
Manual hold override	Yes
Throttle, Air in/out 1A, 1B	0-100 %
Push-in fittings	ø6 mm or 1/4"

#### PHYSICAL DATA

##### Materials

Steel parts	Stainless steel and Brass
Plastic parts	Blue Nylon PA 12
Seals	Nitrile (NBR) rubber

##### Environment

Working temperature	-20 °C to +85 °C
Protection class	IP66 and IP67
Protection class equivalent	NEMA 4.4x and 6P

##### Cable connection

Main cable gland	PG11 (4 - 10 mm)
Max wire size	0.75 mm <sup>2</sup> (AWG 19)
Optional cable gland	PG7 (4 - 6,8 mm)

##### Note!

For further information: See also ESE00355

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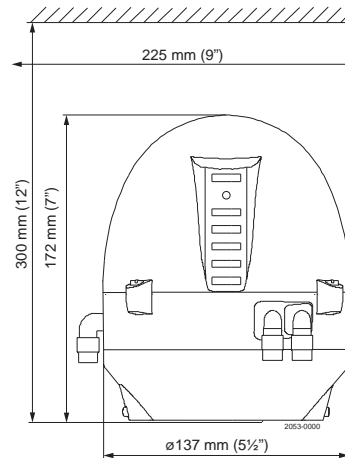


**Options**

- Solenoid valve configuration
- Pneumatic tubing interface

**Accessories**

- Remote programming (IR keypad)
- For upper seat-lift detection on Mixproof valves
  - External PNP sensors (Refer to Brackets and Inductive Sensors)
  - Cable gland PG7
  - External sensor bracket (Refer to Brackets and Inductive Sensors)
- Various cable options
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Special indication pin for Unique SSV-LS, Unique SSV High Pressure valve
- Adaptor for Unique SSSV valves

**Dimensions****DeviceNet features**

Generic		Master/scanner	
		I/O Slave messaging supported by ThinkTop® DeviceNet	
Explicit peer to peer messaging	No	• Bit strobe No	No
I/O peer to peer messaging	No	• Polling	Yes
Configuration consistency value	No	• Cyclic	No
Faulted node recovery	No	• Change of state (COS)	No
Configuration method	EDS fil, Top46-7j	ThinkTop before 2012	
	EDS fil, T-Top RTA	ThinkTop after 2012	

**Electrical connection****DeviceNet bits assignment**

For DeviceNet the following bit assignment can be used

Valve value	Valve command
DI0 Feedback #1 Closed valve	DO0 Out #1 Not Connected
DI1 Feedback #2 Open valve	DO1 Out #2 Solenoid valve 1
DI2 Feedback #3 Seatlift 1	DO2 Out #3 Solenoid valve 2
DI3 Feedback #4 Seatlift 2	DO3 Out #4 Solenoid valve 3
DI4 Feedback #5 Status	DO4 Out #5 Not Connected
DI5 Feedback #6 Not Connected	DO5 Out #6 Not Connected
DI6 Feedback #7 Not Connected	DO6 Out #7 Not Connected
DI7 Feedback #8 Not Connected	DO7 Out #8 Not Connected

# Leave Surveillance to the Top

## Alfa Laval ThinkTop® Basic Digital

### Concept

ThinkTop® Basic is a uniform modular control unit that consists of a proven no-touch, set-and-forget sensor system with light-emitting diodes (LEDs), solenoid valves and valve control sensor board for connection to any PLC (Programming Logic Controller) system with one of the two interfaces; Digital and AS-Interface.

ThinkTop offers a solution for Alfa Laval butterfly, single-seat and Mixproof valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability.

### Working principle

ThinkTop is an automated control unit that can be fitted with up to three solenoid valves and who convert the electrical PLC and sensor signals into mechanical energy to open or close the air-operated valve, using the physical stimulus of an indication pin mounted on the valve stem. ThinkTop Basic fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. To initiate manual setup, simply press the push-button startup sequence.



### TECHNICAL DATA

#### Communication

Interface . . . . . Digital PNP/NPN  
Supply voltage . . . . . 24 ± 10% VDC

#### Sensor board

Max current consumption . . . . . 45mA  
Feedback signal #1 . . . . . De-energized valve  
Feedback signal #2 . . . . . Energized valve  
Feedback signal #5 . . . . . Status  
Valve tolerance band options . . . . . 1  
Default tolerance band . . . . . ± 5 mm  
Sensor accuracy . . . . . ± 0.1 mm  
Stroke length . . . . . 0.1 - 80 mm

#### Solenoid valve

Max current consumption . . . . . 45mA  
Air supply . . . . . 300-900 kPa (3-9 bar)  
Type of solenoids . . . . . 3/2-ways or 5/2-ways  
Numbers of solenoids . . . . . 0-3  
Manual hold override . . . . . Yes  
Throttle, Air in/out 1A, 1B . . . . . 0 - 100%  
Push-in fittings . . . . . ø6 mm or 1/4"

### PHYSICAL DATA

#### Materials

Steel parts . . . . . Stainless steel and Brass  
Plastic parts . . . . . Black Nylon PA 6  
Seals . . . . . Nitrile (NBR) rubber

#### Environment

Working temperature . . . . . -20 °C to +85 °C  
Protection class . . . . . IP66 and IP67  
Protection class equivalent . . . . . NEMA 4.4x and 6P

#### Cable connection

Main cable gland . . . . . PG11 (4 - 10 mm)  
Max wire size . . . . . 0.75 mm<sup>2</sup> (AWG 19)

#### Note!

For further information: See also ESE00225

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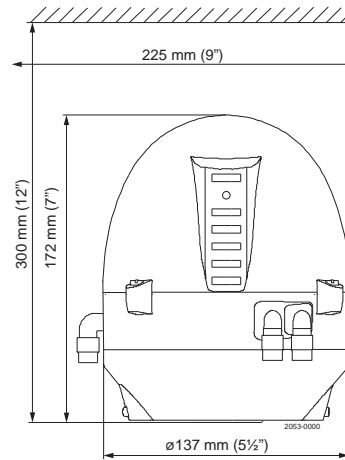
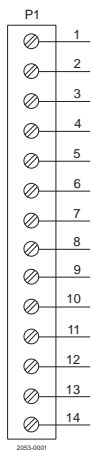


**Options**

- Communication interface
- Solenoid valve configuration
- Pneumatic tubing interface

**Accessories**

- Various cable options
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Special indication pin for Unique SSV-LS, Unique SSV High Pressure valves
- Adaptor for Unique SSSV7000 Small Single Seat valves

**Dimensions****Electrical connection**

- |    |  |
|----|--|
| 1  | De-energized (PLC input)                 |
| 2  | Energized (PLC input)                    |
| 3  | Activation of solenoid # 1 (PLC input)   |
| 4  | Activation of solenoid # 2 (PLC input)   |
| 5  | Activation of solenoid # 3 (PLC input)   |
| 6  | Supply voltage sensor (+) 10-30 VDC      |
| 7  | Supply voltage sensor (+) 0 VDC          |
| 8  | Common supply solenoids                  |
| 9  | PNP/NPN jumper                           |
| 10 | PNP/NPN jumper                           |
| 11 | Solenoid com.blue                        |
| 12 | Solenoid # 1, internal connection (Grey) |
| 13 | Solenoid # 2, internal connection (Grey) |
| 14 | Solenoid # 3, internal connection (Grey) |

# Leave Surveillance to the Top

## Alfa Laval ThinkTop® Basic AS-Interface

### Concept

ThinkTop® Basic is a uniform modular control unit that consists of a proven no-touch, set-and-forget sensor system with light-emitting diodes (LEDs), solenoid valves and valve control sensor board for connection to any PLC (Programming Logic Controller) system with one of the three interfaces; Digital and AS-Interface.

ThinkTop offers a solution for Alfa Laval butterfly, single-seat and Mixproof valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability.

### Working principle

ThinkTop is an automated control unit that can be fitted with up to three solenoid valves and who convert the electrical PLC and sensor signals into mechanical energy to open or close the air-operated valve, using the physical stimulus of an indication pin mounted on the valve stem. ThinkTop Basic fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. To initiate manual setup, simply press the push-button startup sequence.



### TECHNICAL DATA

#### Communication

Interface	AS-Interface v3.0, 62 node
Supply voltage	29.5V - 31.6 VDC
Slave profile v3.0	7.A.7.7
Default slave address	0

#### Sensor board

Max current consumption	45mA
Feedback signal #1	De-energized valve
Feedback signal #2	Energized valve
Feedback signal #5	Status
Valve tolerance band options	1
Default tolerance band	± 5 mm
Sensor accuracy	± 0.1 mm
Stroke length	0.1 - 80 mm

#### Solenoid valve

Max current consumption	45mA
Air supply	300-900 kPa (3-9 bar)
Type of solenoids	3/2-ways or 5/2-ways
Numbers of solenoids	0-3
Manual hold override	Yes
Push-in fittings	ø6 mm or 1/4"

### PHYSICAL DATA

#### Materials

Steel parts	Stainless steel and Brass
Plastic parts	Black Nylon PA 6 Reinforced
Seals	Nitrile (NBR) rubber

#### Environment

Working temperature	-20 °C to +85 °C
Protection class	IP66 and IP67
Protection class equivalent	NEMA 4.4x and 6P

#### Cable connection

Main cable gland	PG11 (4 - 10 mm)
Max wire size	0.75 mm <sup>2</sup> (AWG 19)
Optional main M12 plug	2 wire (A coded)

#### Note!

For further information: See also ESE00356

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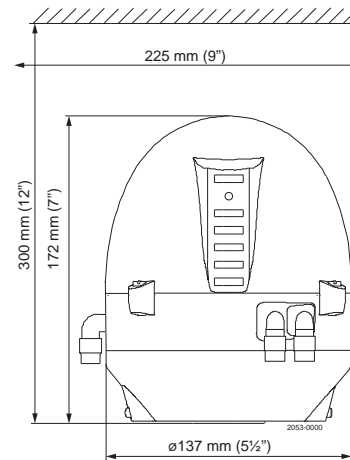
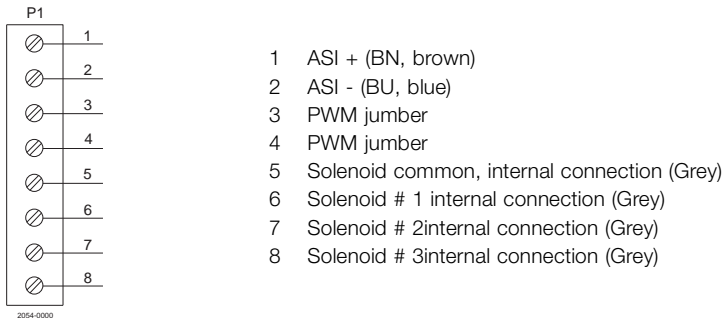
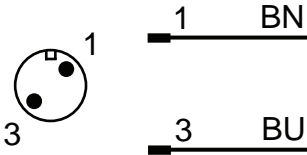


**Options**

- Communication interface
- Solenoid valve configuration
- Pneumatic tubing interface
- Main cable connection

**Accessories**

- Various cable options
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Special indication pin for Unique SSV-LS, Unique SSV High Pressure valves
- Adaptor for Unique SSSV valves

**Dimensions****Electrical connection****M12 plug option****AS-Interface bits assignment**

For AS-Interface version with 62 node, the following bit assignment can be used

DI0	Feedback #1 De-Energized valve
DI1	Feedback #2 Energized valve
DI2	Feedback #3 Not connected
DI3	Feedback #4 Status
DO0	Out #1 Not Connected
DO1	Out #2 Solenoid valve 1
DO2	Out #3 Solenoid valve 2
DO3	Out #4 Solenoid valve 3

# Leave Surveillance to the Top

## Alfa Laval ThinkTop® Basic Intrinsically Safe

### Concept

The ThinkTop® Basic is a uniform modular control unit that consists of a proven touch & set sensor system and by electrical barriers, solenoid valves and feedback sensors can be connected to any PLC (Programming Logic Controller) system with the interfaces; Digital.

ThinkTop Basic offers a solution for Alfa Laval butterfly, single-seat and Mixproof valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability.

### Working principle

ThinkTop Basic is an automated control unit that can be fitted with up to two solenoid valves and who convert the electrical PLC and sensor signals into mechanical energy to open or close the air-operated valve, using the physical stimulus of an indication pin mounted on the valve stem. ThinkTop Basic fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no adapters or tools are required.

### TECHNICAL DATA

#### Communication

Interface Intrinsic . . . . . Intrinsic

#### Sensor board

Feedback signal #1 . . . . . De-energized valve

Feedback signal #2 . . . . . Energized valve

#### Inductive sensor

Switching element function . . . . . NAMUR NC

Nominal voltage . . . . . 8 V

Indication of the state . . . . . LED, yellow (Internally)

EMC in accordance with . . . . . IEC / EN 60947-5-2:2004; NE 21

Standards . . . . . DIN EN 60947-5-6 (NAMUR)

Certificate of conformity . . . . . PTB 00 ATEX 2032 X

#### Solenoid valve

Air supply . . . . . 150-700 kPa (1.5-7 bar)

Type of solenoids . . . . . 3/2-ways

Numbers of solenoids . . . . . 0-2

Manual hold override . . . . . Yes

Push-in fittings . . . . . Ø6 mm or 1/4"

Certificate of conformity . . . . . KEMA 08 ATEX 0093 X



### PHYSICAL DATA

#### Materials

Steel parts . . . . . Stainless steel and Brass

Plastic parts . . . . . Black Nylon PA 6 with SS fibers

Seals . . . . . Nitrile (NBR) rubber

#### Environment

Working temperature . . . . . -10 °C to +45 °C

Protection class . . . . . IP66 and IP67

Protection class equivalent . . . . . NEMA 4.4x and 6P

Ex classification code . . . . . II 2G/D EEx ia IIC T6

#### Cable connection

Main cable gland . . . . . PG11 (4 - 10 mm)

Max wire size . . . . . 0.75 mm<sup>2</sup> (AWG 19)

#### Note!

For further information: See also ESE00810










**Options**

- Solenoid valve configuration
- Pneumatic tubing interface

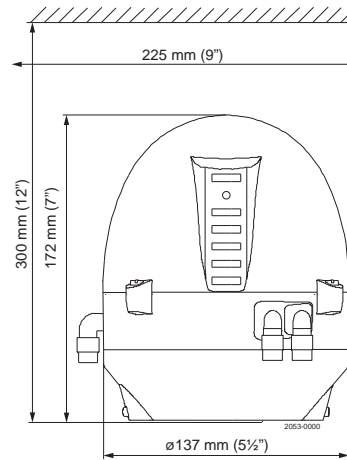
**Accessories**

- Various cable options
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Special indication pin for Unique SSV-LS, Unique SSV High Pressure valves
- Adaptor for Unique SSSV valves


**Electrical connection**

	1	1. Sensor 1 [De-energized] (blue) 8 VDC (-)
	2	2. Sensor 1 [De-energized] (brown) (+)
	3	3. Sensor 2 [Energized] (blue) 8 VDC (-)
	4	4. Sensor 2 [Energized] (brown) (+)
	5	5. Common; solenoids (black) 12 VDC (-)
	6	6. Input; solenoid #1 (red) (+)
	7	7. Input; solenoid #3 (red) (+)

**Dimensions**



The following table list show the ATEX evaluated Alfa Laval valves which the ThinkTop Basic Intrinsically Safe can be installed on to be accordance with Atex Directive 94/9/EC.

Valve / Actuator type	ATEX evaluation notes
Unique SSV ATEX	 !! 2 G D c T4
Unique Mixproof	Non electric equipment with no own ignition source which can be used within the equipment-group II 2 G/D or II 3 G/D if removing the blue plastic cover from the bottom of the Mixproof valve.
SRC (except SRC-LS) SMP-SC, TO, BC LKLA-T	Non electric equipment with no own ignition source which can be used within the equipment-group II 2 G/D or II 3 G/D
Shutter valve SBV	

**Electrical interface**

To comply with the ATEX protective system all individual electrical signals from the control unit must be connected to an electrical barrier in the safe area to obtain the intrinsic safe circuit. The electrical barrier must comply with the standard EN 60079-14 and shall always be specified in accordance with the following maximum values as shown in the table below for sensor and solenoid valve (I/O signals).

**Sensor**

The two inductive NAMUR sensors must be connected to a certified intrinsically safe circuit (e.g. Zener barrier) for apparatus group IIC with the following maximum values:

Max allowed Voltage (Ui)	15	V
Max allowed Current (Ii)	50	mA
Max allowed Power (Pi)	1	W
Max Inductance (Li)	100	µH
Max Capacitance (Ci)	100	nF

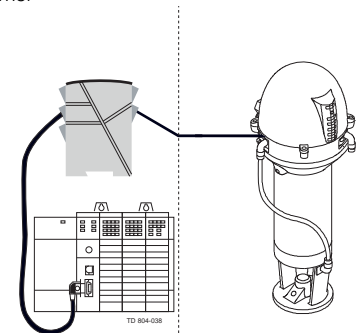
**Solenoid valve**

The intrinsic safe solenoid valves must also be connected to a certified intrinsically safe circuit (e.g. Zener barrier) for apparatus group IIC with the following maximum values:

Max allowed Voltage (Ui)	28	V
Max allowed Current (Ii)	225	mA
Max allowed Power (Pi)	1	W
Max Inductance (Li)	0	mH
Max Capacitance (Ci)	0	nF

Safe Area  
Electrical barrier

Hazardous Area - Zone 1



## Leave Surveillance to the Top

### Alfa Laval ThinkTop® D30 Digital

#### Concept

The ThinkTop D30 is a basic valve control unit that consists of a proven no-touch sensor system with 360-degree LED visual indication, an integrated solenoid valve for spring-loaded actuator, and valve control sensor board for connection to any PLC (Programming Logic Controller) system with digital interface.

ThinkTop D30 offers a simplify solution for Alfa Laval butterfly and single-seat valves and is designed for use in the dairy, food and beverage, and biopharm industries; ThinkTop D30 is a supplement, alternative solution to optimize applications instead of using external solenoid valves and the existing range of control units.

#### Working principle

ThinkTop D30 fits onto nearly all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. ThinkTop D30 is an easy-to-use plug 'n play control unit with one 3/2-way solenoid valve and with integrated intelligence to monitor the status of the operating air pressure, identifying air loss or leakage. By getting the electrical PLC and sensor signals the integrated solenoid valve enables control of the processing valve by open or closing the air-operated valve.



#### TECHNICAL DATA

##### Communication

Interface . . . . . Digital PNP

##### Sensor board

Max current consumption . . . . . 45mA  
 Feedback signal #1 . . . . . De-energized valve  
 Feedback signal #2 . . . . . Energized valve  
 Feedback signal #3 . . . . . Alarm

##### Solenoid valve

Max current consumption . . . . . 45mA  
 Air supply . . . . . 400 - 700 kPa (4 - 7 bar)  
 Type of solenoid . . . . . 3/2-ways  
 Number of solenoids . . . . . 1  
 Manual hold override . . . . . Yes  
 Push-in fittings . . . . . ø6 mm

#### PHYSICAL DATA

##### Materials

Steel parts . . . . . Stainless Steel and Brass  
 Plastic parts . . . . . Black Nylon PA 6  
 Seals . . . . . Nitrile (NBR) rubber

##### Environment

Working temperature . . . . . -10 °C to +50 °C  
 Protection class . . . . . IP66 and IP67

##### Cable connection

Max wire size . . . . . 0.5 mm<sup>2</sup> (AWG 20)

##### Note

For further information: See also ESE02248



**Options**

- Pneumatic tubing interface

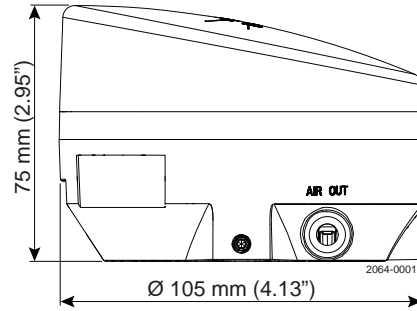
**Accessories**

- Various cable options
- Elbow pneumatic fittings for adapting various tubing
- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Adaptor for Unique SSSV valves

**Compatible valves**

ARC	Yes	SBV	Yes
SRC	Yes	Koltek	Yes
Unique SSV	Yes	SMP valves	Yes
iSSV	Yes	Unique Mixproof	No
LKLA-T	Yes	Unique SSV Long stroke	No
LKLA	No	Unique SSV High pressure DN80 - DN100	No
Air/Air actuator	No	SRC Long stroke	No
		Unique SSV DN125 - DN150	No

**Dimensions**



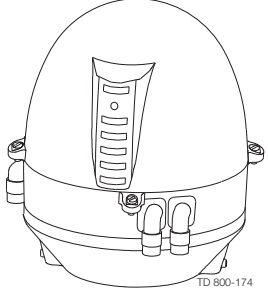
**Electrical connection**

Digital Interface  
Sensor board  
Terminal strip

Connection of power supply	{	GND	-
	{	24 VDC	+
PLC output signal	{	Trigger solenoid	T
	{	Alarm	A
PLC input signals	{	De-Energized	D
	{	Energized	E

Top unit  
Product code: 5402

Valves: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, Unique Mixproof, Unique-TO, SMP-BC, LKLA-T (LKB), Shutter valve, SBV.

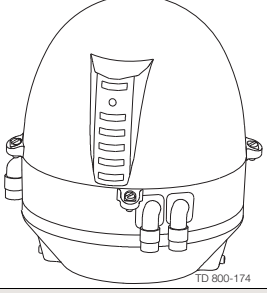
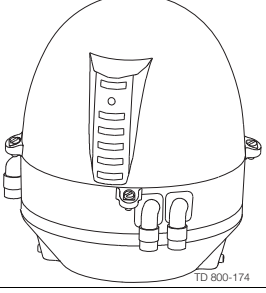
Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop® Digital 8-30 VDC PNP/NPN</b>							
9612578901	<b>498</b>	8-30 VDC PNP/NPN	0				 <p style="text-align: right; font-size: small;">TD 800-174</p>
9612578902	<b>687</b>	8-30 VDC PNP/NPN	1	24 VDC	ø6 mm	3/2	
9612578903	<b>860</b>	8-30 VDC PNP/NPN	2	24 VDC	ø6 mm	3/2	
9612578904	<b>1032</b>	8-30 VDC PNP/NPN	3	24 VDC	ø6 mm	3/2	
9612578905	<b>716</b>	8-30 VDC PNP/NPN	1	24 VDC	ø6 mm	5/2	
9612578952	<b>687</b>	8-30 VDC PNP/NPN	1	24 VDC	1/4"	3/2	
9612578953	<b>860</b>	8-30 VDC PNP/NPN	2	24 VDC	1/4"	3/2	
9612578954	<b>1032</b>	8-30 VDC PNP/NPN	3	24 VDC	1/4"	3/2	
9612578955	<b>716</b>	8-30 VDC PNP/NPN	1	24 VDC	1/4"	5/2	

Indication pin for Long Stroke and High Pressure Valves are found in the PD sheet - Ordering



Top Unit  
Product code: 5402

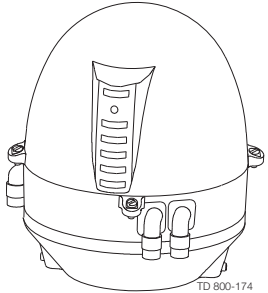
Valves: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, Unique Mixproof, Unique-TO, SMP-BC, LKLA-T (LKB), Shutter valve, SBV.

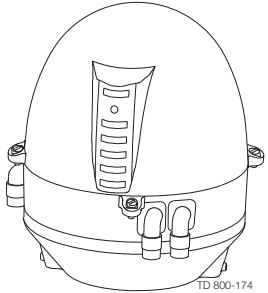
Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop® AS-Interface 31 node (version 2.1)</b>							
9612615501	<b>769</b>	AS-Interface 29.5 - 31.6 VDC	0				
9612615502	<b>958</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	ø6 mm	3/2	
9612615503	<b>1131</b>	AS-Interface 29.5 - 31.6 VDC	2	24 VDC	ø6 mm	3/2	
9612615504	<b>1305</b>	AS-Interface 29.5 - 31.6 VDC	3	24 VDC	ø6 mm	3/2	
9612615505	<b>987</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	ø6 mm	5/2	
9612615552	<b>958</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	1/4"	3/2	
9612615553	<b>1131</b>	AS-Interface 29.5 - 31.6 VDC	2	24 VDC	1/4"	3/2	
9612615554	<b>1305</b>	AS-Interface 29.5 - 31.6 VDC	3	24 VDC	1/4"	3/2	
9612615555	<b>987</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	1/4"	5/2	
<b>ThinkTop® AS-Interface 62 node (version 3.0 rev 1)</b>							
9612615511	<b>769</b>	AS-Interface 29.5 - 31.6 VDC	0				
9612615512	<b>958</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	ø6 mm	3/2	
9612615513	<b>1131</b>	AS-Interface 29.5 - 31.6 VDC	2	24 VDC	ø6 mm	3/2	
9612615514	<b>1305</b>	AS-Interface 29.5 - 31.6 VDC	3	24 VDC	ø6 mm	3/2	
9612615515	<b>987</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	ø6 mm	5/2	
9612615562	<b>958</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	1/4"	3/2	
9612615563	<b>1131</b>	AS-Interface 29.5 - 31.6 VDC	2	24 VDC	1/4"	3/2	
9612615564	<b>1305</b>	AS-Interface 29.5 - 31.6 VDC	3	24 VDC	1/4"	3/2	
9612615565	<b>987</b>	AS-Interface 29.5 - 31.6 VDC	1	24 VDC	1/4"	5/2	

Indication pin for Long Stroke and High Pressure Valves are found in the PD sheet - Ordering

Top unit  
Product code: 5419

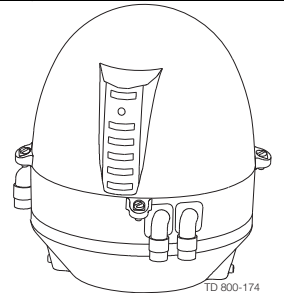
Valve: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, Unique Mixproof, Unique-TO, SMP-BC, LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop AS-Interface 31 node with M12 plug connection (Version 2.1)</b>							
9615322001	<b>989</b>	AS-Interface (29.5 - 31.6 VDC)	0				 <p style="text-align: right; font-size: small;">TD 800-174</p>
9615322002	<b>1172</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	ø6 mm	3/2	
9615322003	<b>1341</b>	AS-Interface (29.5 - 31.6 VDC)	2	24 VDC	ø6 mm	3/2	
9615322004	<b>1509</b>	AS-Interface (29.5 - 31.6 VDC)	3	24 VDC	ø6 mm	3/2	
9615322005	<b>1201</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	ø6 mm	5/2	
9615322052	<b>1172</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	1/4"	3/2	
9615322053	<b>1341</b>	AS-Interface (29.5 - 31.6 VDC)	2	24 VDC	1/4"	3/2	
9615322054	<b>1509</b>	AS-Interface (29.5 - 31.6 VDC)	3	24 VDC	1/4"	3/2	
9615322055	<b>1201</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	1/4"	5/2	

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop AS-Interface 62 node with M12 plug connection (Version 3.0 rev. 1)</b>							
9615322011	<b>989</b>	AS-Interface (29.5 - 31.6 VDC)	0				 <p style="text-align: right; font-size: small;">TD 800-174</p>
9615322012	<b>1172</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	ø6 mm	3/2	
9615322013	<b>1341</b>	AS-Interface (29.5 - 31.6 VDC)	2	24 VDC	ø6 mm	3/2	
9615322014	<b>1509</b>	AS-Interface (29.5 - 31.6 VDC)	3	24 VDC	ø6 mm	3/2	
9615322015	<b>1201</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	ø6 mm	5/2	
9615322062	<b>1172</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	1/4"	3/2	
9615322063	<b>1341</b>	AS-Interface (29.5 - 31.6 VDC)	2	24 VDC	1/4"	3/2	
9615322064	<b>1509</b>	AS-Interface (29.5 - 31.6 VDC)	3	24 VDC	1/4"	3/2	
9615322065	<b>1201</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	1/4"	5/2	

Top Unit  
Product code: 5406

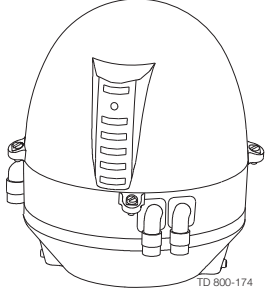
Valves: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, Unique Mixproof, Unique-TO, SMP-BC, LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
ThinkTop® DeviceNet 11-25 VDC							
9612639601	819	DeviceNet 11-25 VDC	0				
9612639602	1000	DeviceNet 11-25 VDC	1	8 VDC	ø6 mm	3/2	
9612639603	1163	DeviceNet 11-25 VDC	2	8 VDC	ø6 mm	3/2	
9612639604	1412	DeviceNet 11-25 VDC	3	8 VDC	ø6 mm	3/2	
9612639605	1025	DeviceNet 11-25 VDC	1	8 VDC	ø6 mm	5/2	
9612639652	1000	DeviceNet 11-25 VDC	1	8 VDC	1/4"	3/2	
9612639653	1163	DeviceNet 11-25 VDC	2	8 VDC	1/4"	3/2	
9612639654	1412	DeviceNet 11-25 VDC	3	8 VDC	1/4"	3/2	
9612639655	1025	DeviceNet 11-25 VDC	1	8 VDC	1/4"	5/2	

Indication pin for Long Stroke and High Pressure Valves are found in the PD sheet - Ordering

Top unit  
Product code: 5403

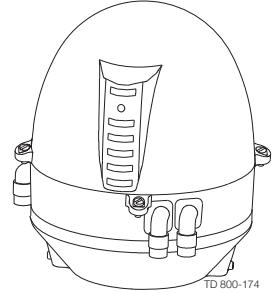
Valves: Unique SSV, Unique Mixproof, SMP-BC, SMP-SC,  
LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop® Basic 10-30 VDC PNP/NPN</b>							
9613419801	<b>419</b>	10-30 VDC PNP/NPN	0				 <p style="text-align: right; font-size: small;">TD 800-174</p>
9613419802	<b>578</b>	10-30 VDC PNP/NPN	1	24 VDC	ø6 mm	3/2	
9613419803	<b>745</b>	10-30 VDC PNP/NPN	2	24 VDC	ø6 mm	3/2	
9613419804	<b>913</b>	10-30 VDC PNP/NPN	3	24 VDC	ø6 mm	3/2	
9613419805	<b>604</b>	10-30 VDC PNP/NPN	1	24 VDC	ø6 mm	5/2	
9613419852	<b>578</b>	10-30 VDC PNP/NPN	1	24 VDC	1/4"	3/2	
9613419853	<b>745</b>	10-30 VDC PNP/NPN	2	24 VDC	1/4"	3/2	
9613419854	<b>913</b>	10-30 VDC PNP/NPN	3	24 VDC	1/4"	3/2	
9613419855	<b>604</b>	10-30 VDC PNP/NPN	1	24 VDC	1/4"	5/2	

Indication pin for Long Stroke and High Pressure Valves are found in the PD sheet - Ordering

Top Unit  
Product code: 5410

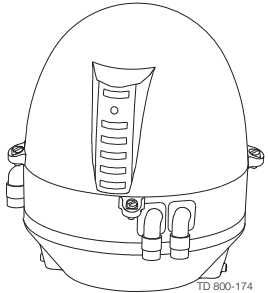
Valves: Unique SSV, Unique Mixproof, SMP-BC, SMP-SC,  
LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop® Basic AS-Interface 62 node (version 3.0 rev 1)</b>							
9613484401	<b>585</b>	AS-Interface (29.5-31.6 VDC)	0				
9613484402	<b>724</b>	AS-Interface (29.5-31.6 VDC)	1	24 VDC	ø6 mm	3/2	
9613484403	<b>853</b>	AS-Interface (29.5-31.6 VDC)	2	24 VDC	ø6 mm	3/2	
9613484404	<b>984</b>	AS-Interface (29.5-31.6 VDC)	3	24 VDC	ø6 mm	3/2	
9613484405	<b>744</b>	AS-Interface (29.5-31.6 VDC)	1	24 VDC	ø6 mm	5/2	
9613484452	<b>724</b>	AS-Interface (29.5-31.6 VDC)	1	24 VDC	1/4"	3/2	
9613484453	<b>853</b>	AS-Interface (29.5-31.6 VDC)	2	24 VDC	1/4"	3/2	
9613484454	<b>984</b>	AS-Interface (29.5-31.6 VDC)	3	24 VDC	1/4"	3/2	
9613484455	<b>744</b>	AS-Interface (29.5-31.6 VDC)	1	24 VDC	1/4"	5/2	

Indication pin for Long Stroke and High Pressure Valves are found in the PD sheet - Ordering


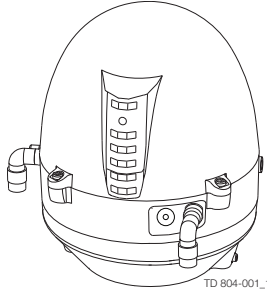
Top unit  
Product code: 5421

Valve: Unique SSV, Unique Mixproof, SMP-BC, SMP-SC,  
LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	
<b>ThinkTop Basic AS-Interface 62 node with M12 plug connection (Version 3.0 rev. 1)</b>							
9615321901	<b>811</b>	AS-Interface (29.5 - 31.6 VDC)	0				
9615321902	<b>946</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	ø6 mm	3/2	
9615321903	<b>1071</b>	AS-Interface (29.5 - 31.6 VDC)	2	24 VDC	ø6 mm	3/2	
9615321904	<b>1198</b>	AS-Interface (29.5 - 31.6 VDC)	3	24 VDC	ø6 mm	3/2	
9615321905	<b>965</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	ø6 mm	5/2	
9615321952	<b>946</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	1/4"	3/2	
9615321953	<b>1071</b>	AS-Interface (29.5 - 31.6 VDC)	2	24 VDC	1/4"	3/2	
9615321954	<b>1198</b>	AS-Interface (29.5 - 31.6 VDC)	3	24 VDC	1/4"	3/2	
9615321955	<b>965</b>	AS-Interface (29.5 - 31.6 VDC)	1	24 VDC	1/4"	5/2	

Top unit  
Product code: 5405

ThinkTop Basic Intrinsically Safe supports the following valve types:  
SRC, Unique SSV ATEX, Unique Mixproof, SMP-BC, SMP-SC,  
SMP-TO, LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection	Valve type	 II 2G/D EEx ia IIC T6 ThinkTop® Basic Intrinsically Safe
9613468801	<b>498</b>	8 VDC NAMUR NC	0				
9613468810	<b>735</b>	8 VDC NAMUR NC	1	12 VDC	ø6 mm	3/2	
9613468811	<b>971</b>	8 VDC NAMUR NC	2	12 VDC	ø6 mm	3/2	
9613468820	<b>735</b>	8 VDC NAMUR NC	1	12 VDC	1/4"	3/2	
9613468821	<b>971</b>	8 VDC NAMUR NC	2	12 VDC	1/4"	3/2	

## NOTE!

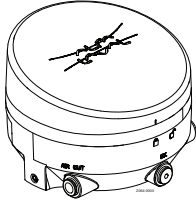
ThinkTop Basic Intrinsically Safe does not support SRC-LS and Unique SSV-LS.

Contact customer support to get the "Atex product statement 2009" with listed valves inside/outside the scope of ATEX directive 94/9/EC .

This ATEX approval only cover the ThinkTop Basic Intrinsically Safe.

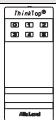


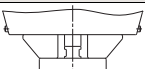






Product code: 5418

Valves: SRC, Unique SSV, SMP-BC, LKLA-T (LKB), Koltek, SBV.  
 Except: SRC-LS, Unique SSV-LS, SSV, (DN80 & DN100 high pressure).

Item No.	PPL EUR	Supply sensor system	Solenoid No.	Supply solenoids	Ext. air tube connection		Valve type	
								ThinkTop® D30
9614191101	344	24 VDC	1	24 VDC	ø6 mm		3/2	

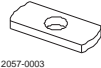

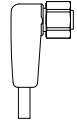
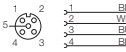





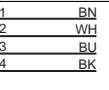
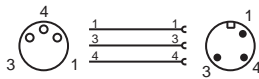
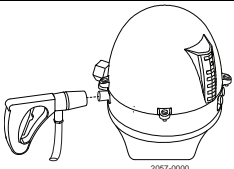



Product code: 5416

Item No.	PPL EUR	Description	
<b>Accessories</b>			
9611993526	256	ThinkTop® IR Keypad.	
<b>Drop cable for AS-Interface</b>			
9611993518	58	2 m cable (2 x 0.5 mm <sup>2</sup> ) with AS-I flat cable connector IP 67.	
<b>5 m cable for Digital version</b>			
9611993627	38	5 m. flying cable, PVC (12 x 0.5 mm <sup>2</sup> ) (with numbers), OD = ø9 mm.	
<b>Unique SSSV size 12.7-19.0 mm</b>			
9612947601	124	Adapter set for mounting of ThinkTop, ThinkTop Basic and IndiTop onto SSSV size 12,7mm - 19.0mm	
<b>Adapter set for hygienic Ball Valve</b>			
9612647528	746	Adapter set for ThinkTop. ThinkTop Basic and IndiTop used on SBV size 25 - 76.1 mm	
9612647610	901	Adapter set for ThinkTop, ThinkTop Basic and IndiTop used on SBV size 100 mm	
<b>Cable gland PG7 (Black)</b>			
9611993603	6	For external sensor connection to ThinkTop	
<b>Air-fittings used with toolbox</b>			
9611995217	8	Cartridge straight air fitting ø6mm	
<b>Elbow pneumatic fittings for adapting various tubing</b>			
9611995678	8	Push in L-fitting ø6mm to ø6mm (Black rim)	
9611995679	8	Push in L-fitting ø6mm to 1/4" (Grey rim)	
<b>Special indication pin</b>			
9614066001	185	Special indication pin for Unique SSV-LS valves and Unique SSV High Pressure valves size 76.1-101.6mm/DN 80-100	

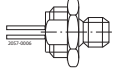
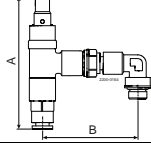
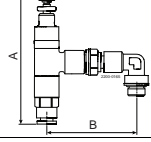
Note 1: Applied to control and sensor units with M12 plug connector.

Product code: 5416




Item No.	PPL EUR	Description	
<b>Threaded plate</b>			
3135707012	8	Threaded plate for indication pin on SRC, SMP-BC and I-SSV valves	 2057-0003
<b>Sample Valves - Adapter for M5 Inductive sensor IY5036 and IY5046</b>			
9614017401 9614257901	52 125	(Open valve position only) - Valve size 4 and 10 (Open valve position only) - Valve size 25	 2057-0002
<b>Connection cable with M12, 4 pin socket for side Indication units and Inductive sensors and Control unit with AS-Interface</b>			
9611995203 9611995204 9611995205 9611995206	30 43 30 43	5 m cable, 4 wire with straight socket connector 10 m cable, 4 wire with straight socket connector 5 m cable, 4 wire with angled socket connector 10 m cable, 4 wire with angled socket connector	 
Note 1:			
<b>Connection cable with M12, 8 pin socket for Control unit Type 8691/8695 Digital interface</b>			
9611995303 9611995304	98 137	5 m, 8 wire 8 with straight socket connector 10 m, 8 8 wire with straight socket connector	 
Note 1:			
<b>Connection cable with M12, 5 pin socket for Control unit Type 8691 DeviceNet</b>			
9611995362 9611995363	58 74	5 m cable, 5 wire with straight socket connector 10 m cable, 5 wire with straight socket connector	 
Note 1:			
<b>Connection cable with M12, 4 pin socket for Inductive sensor (PMO)</b>			
9611994915	79	5 m black cable, 4 wire with angled socket connector	 
Note 1:			
<b>Jumper cable M8 socket -&gt; M12 plug connector, 3 pin : Applying for the M5 inductive sensor IY036</b>			
9611995652	35	0,3 m, 3 wire with M8 angled and M12 straight cable connectors	
<b>Toolbox for exchanging air-fittings on ThinkTop and ThinkTop Basic</b>			
9614199301	612	Toolbox including 100 pcs. blind rivets Please note: Repair instructions is included in the toolbox	 2057-0000
<b>Blind rivets used with toolbox</b>			
9614209201	229	Spare blind rivets, 100 pcs	 2057-0001

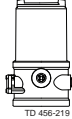
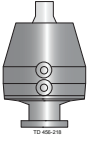
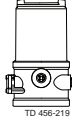
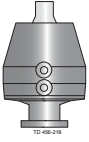
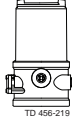
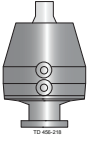
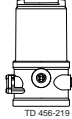
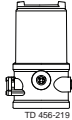
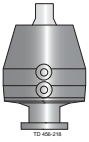
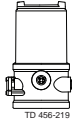
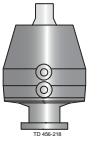
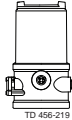
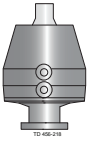
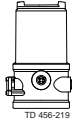
Note 1: Applied to control and sensor units with M12 plug connector.

Product code: 5416

Item no.	PPL EUR	Description	
<b>M12 plug for AS-Interface connection</b>			
9611995920	221	M12, 2 wire plug for ThinkTop and ThinkTop Basic AS-Interface	EVT459 
<b>Air Reduction Valve</b>			
9611995903	49	Air Reduction Valve set to 3 bar	
<b>Air Reduction Valve</b>			
9611995904	49	Air Reduction Valve adjustable	

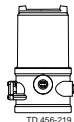
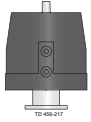
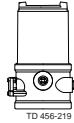
Product code: 5417


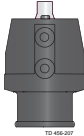
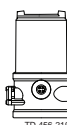
Accessories	8690	8691	8695
<b>Sensing &amp; Control Diaphragm valves</b>			
<b>Valve</b>			
Unit size (HxW)	86x91 mm	124x66 mm	119x91 mm
<b>Automation</b>			
Positioner with display			
Positioner without display			
Control unit	✓	✓	✓
Indication unit			
Electrical ATEX unit			
<b>Supply Voltage</b>			
8 VDC			
24 VDC	✓	✓	✓
24 VAC			
250 VAC			
<b>Number of Solenoid valve</b>			
One (1) pilot valve, Single acting	✓	✓	✓
Two (2) pilot valve, Double acting	✓	✓	✓
<b>Feedback signal</b>			
Optical Indication	✓	✓	✓
Open and Close	✓	✓	✓
Open			
Close			
<b>Sensor &amp; Interface</b>			
Contactless		✓	✓
Reed-Contact			
Micro-switch	✓		
Inductive sensor	✓		
NAMUR sensor EEx ia			
PNP	✓	✓	✓
NPN			
Digital Interface	✓	✓	✓
AS-Interface v3.0, Max 62 node		✓	✓
DeviceNet, Max 63 node		✓	
Analogue interface 4-20 mA			
Mechanical - Manual override			
<b>Cable connection</b>			
PG gland	✓		
M12 Plug, 4 pin - AS-Interface		✓	✓
M12 Plug, 5 pin - DeviceNet		✓	
M12 Plug, 8 pin - Digital Interface		✓	✓
<b>Protection</b>			
Class IP65	✓	✓	✓
Class IP67	✓	✓	✓

Diaphragm Actuator Stainless steel/Stainless steel						Control unit 8690										
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air fittings	Interface	SS/SS					
9614092601	479	NC NO	DN 8	1	EPDM	PTFE	 Single acting	1	Open and Close	ø6 mm and ¼"	Micro-switch 24VDC					
9614092603	479		DN 15	2												
			DN 20													
9614092701	513		DN 8	1	EPDM	PTFE		 Single acting	1	Open and Close	ø6 mm and ¼"		Inductive sensor 24VDC			
9614092703	513		DN 15	2												
			DN 20													
9614092607	479		DN 25	3	EPDM	PTFE			 Single acting	1	Open and Close		ø6 mm and ¼"		Micro-switch 24VDC	
9614092610	479		DN 40	5												
			DN 50													
9614092707	513		DN 25	3	EPDM	PTFE				 Single acting	1		Open and Close		ø6 mm and ¼"	
9614092710	513	DN 40	5													
		DN 50														
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H86xW91	Pilot valve				Position feedback	Air fittings	Interface		SS/SS	
9614093001	502	AA	DN 8	1	EPDM	PTFE	 Double acting	2			Open and Close	ø6 mm and ¼"	Micro-switch 24VDC			
9614093003	502		DN 15	2												
			DN 20													
9614093101	535		DN 8	1	EPDM	PTFE		 Double acting	2		Open and Close	ø6 mm and ¼"	Inductive sensor 24VDC			
9614093103	535		DN 15	2												
			DN 20													
9614093007	502		DN 25	3	EPDM	PTFE			 Double acting	2	Open and Close	ø6 mm and ¼"	Micro-switch 24VDC			
9614093010	502		DN 40	5												
			DN 50													
9614093107	535		DN 25	3	EPDM	PTFE				 Double acting	2	Open and Close	ø6 mm and ¼"			
9614093110	535	DN 40	5													
		DN 50														

Product code 5417

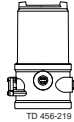
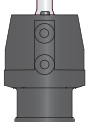
3.2

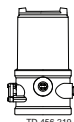
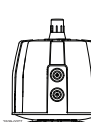
Diaphragm Actuator Composite/Stainless steel						Control unit 8690								
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air fittings	Interface	C/SS			
9614092601	479	NC NO	DN 8	1	EPDM	 Single acting	1	Open and Close	ø6 mm and ¼"	Micro-switch 24VDC				
9614092603	479		DN 15									2	EPDM	PTFE
9614092701	513		DN 20	1	EPDM			PTFE	Open and Close	ø6 mm and ¼"				
9614092703	513		DN 8									2	EPDM	PTFE
9614092607	479		DN 15	3	EPDM			PTFE	1	Open and Close				
9614092610	479		DN 40									5	EPDM	PTFE
9614092707	513		DN 50	3	EPDM		PTFE	Open and Close	ø6 mm and ¼"	Inductive sensor 24VDC				
9614092710	513		DN 25									5	EPDM	PTFE
9614092612	546		DN 40	6	EPDM		PTFE	1	Open and Close	ø6 mm and ¼"				
9614092712	580		DN 80									7	EPDM	PTFE
9614093001	502		AA	DN 65	6		EPDM	 Double acting	2	Open and Close				
9614093003	502			DN 8								1	EPDM	PTFE
9614093101	535	DN 15		2	EPDM	PTFE	2			Open and Close	ø6 mm and ¼"			
9614093103	535	DN 20										3	EPDM	PTFE
9614093007	502	DN 25		5	EPDM	PTFE	2			Open and Close	ø6 mm and ¼"			
9614093010	502	DN 40										3	EPDM	PTFE
9614093107	535	DN 50		5	EPDM	PTFE	2		Open and Close	ø6 mm and ¼"	Micro-switch 24VDC			
9614093110	535	DN 25										6	EPDM	PTFE
9614093012	568	DN 40		7	EPDM	PTFE	2		Open and Close	ø6 mm and ¼"	Micro-switch 24VDC			
9614093112	602	DN 50										6	EPDM	PTFE
		DN 65		7	EPDM	PTFE	2		Open and Close	ø6 mm and ¼"	Micro-switch 24VDC			
		DN 80										7	EPDM	PTFE

Diaphragm Actuator Composite/Composite						Control unit 8690							
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air fittings	Interface	C/C		
9614092601	479	NO	DN 15	1	EPDM	 TD 456-219 Single acting	1	Open	ø6 mm	Micro-switch 24VDC	 TD 456-207		
9614092603	479		DN 20	2	EPDM			and	and ¼"				
9614092701	513		DN 25					Close					
9614092703	513		DN 15	1	EPDM			Open	ø6 mm	Inductive sensor 24VDC			
9614092608	479		DN 20	4	EPDM		and	and ¼"					
9614092708	513		DN 25				Close		ø6 mm	Inductive sensor 24VDC			
9614092607	479		DN 40	3	EPDM		 TD 456-219 Single acting	1	Open			ø6 mm	Micro-switch 24VDC
9614092603	479		DN 20	2	EPDM				PTFE	and		and ¼"	
9614092701	513	DN 25	Close										
9614092703	513	DN 15	1	EPDM	Open	ø6 mm			Inductive sensor 24VDC				
9614092607	479	DN 20	2	EPDM	PTFE	and				and ¼"			
9614092608	479	DN 25				Close							
9614092607	479	DN 25	3	EPDM	PTFE	1			Open	ø6 mm	Micro-switch 24VDC		
9614092608	479	DN 40	4	EDPM					PTFE	and		and ¼"	
9614092610	479	DN 50	5	EDPM	PTFE			Close					
9614092608	479	DN 25	3	EDPM				PTFE	Open	ø6 mm	Inductive sensor 24VDC		
9614092610	479	DN 40	4	EDPM	PTFE				and	and ¼"			
9614092707	513	DN 50	5	EDPM				PTFE	Close				
9614092708	513	DN 25	3	EDPM	PTFE				Open	ø6 mm	Inductive sensor 24VDC		
9614092708	513	DN 40	4	EDPM				PTFE	and	and ¼"			
9614092710	513	DN 50	5	EDPM	PTFE	Close							
9614092708	513	DN 25	3	EDPM		PTFE		Open	ø6 mm	Inductive sensor 24VDC			
9614092710	513	DN 40	4	EDPM	PTFE		and	and ¼"					
9614092710	513	DN 50	5	EDPM		PTFE	Close						

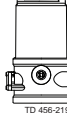

Product code 5417

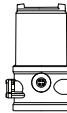

3.2

Diaphragm Actuator Composite/Composite						Control unit 8690					
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air fittings	Interface	C/C
9614093001	502	AA	DN 15	1	EPDM	 Double acting	2	Open and Close	ø6 mm and ¼"	Micro-switch 24VDC	
9614093003	502		DN 20	2	EPDM						
9614093101	535		DN 25								
9614093103	535		DN 15	2	EPDM			Open and Close	ø6 mm and ¼"	Inductive sensor 24VDC	
9614093007	502		DN 20								
9614093008	502		DN 25								
9614093010	502		DN 25	3			2	Open and Close	ø6 mm and ¼"	Micro-switch 24VDC	
9614093008	502		DN 40	4	EPDM						
9614093010	502		DN 50	5							
9614093107	535		DN 25	3				Open and Close	ø6 mm and ¼"	Inductive sensor 24VDC	
9614093108	535		DN 40	4	EPDM						
9614093110	535		DN 50	5							
9614093108	535		DN 40	5							
9614093108	535		DN 50	4	EDPM						
9614093110	535	DN 50	5								

Diaphragm Actuator Composite/Stainless Steel						Control unit 8690					
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air Fittings	Interface	DV-P
9614092601	479	NO	DN 15	1	EPDM	 Single Acting	1	Open and Close	ø6 mm and 1/4"	Micro-switch 24VDC	
9614092603	479		DN 20	2							
9614092701	513		DN 25								
9614092703	513		DN 15	2	EPDM			Open and Close	ø6 mm and 1/4"	Inductive sensor 24VDC	
9614092608	479		DN 20								
9614092708	513		DN 25								
9614092608	479		DN 40	4	EPDM		1	Open and Close	ø6 mm and 1/4"	Micro-switch 24VDC	
9614092708	513		DN 50	4	EPDM						
9614092708	513	DN 40	4	EPDM							
9614092708	513	DN 50	4	EPDM							

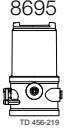
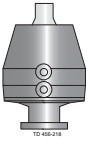
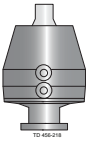

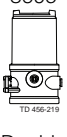
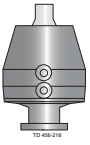
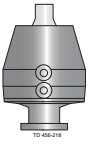



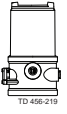

Diaphragm Actuator Composite/Composite						Control unit 8690					
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air Fittings	Interface	DV-P
9614092601	479	NC	DN 15	1	EPDM	 Single Acting	1	Open and Close	ø6 mm and 1/4"	Micro-switch 24VDC	
9614092603	479		DN 20	2	EPDM						
9614092701	513		DN 15					1	EPDM		
9614092703	513		DN 20	2	EPDM			PTFE			
9614092607	479		DN 25				3			PTFE	
9614092608	479		DN 40	4	EPDM						
9614092610	479		DN 50	5			PTFE				
9614092608	479		DN 50	4	EPDM						
9614092610	479		DN 25	3			PTFE				
9614092707	513		DN 25	4	EPDM						
9614092708	513		DN 40	5			PTFE				
9614092710	513		DN 40	4	EPDM						
9614092708	513		DN 50	5			PTFE				
9614092710	513		DN 50	4	EPDM						
9614092710	513		DN 50	5			PTFE				

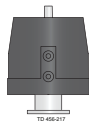
Diaphragm Actuator Composite/Composite						Control unit 8690					
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air Fittings	Interface	DV-P
9614093001	502	AA	DN 15	1	EPDM	 Double Acting	2	Open and Close	ø6 mm and 1/4"	Micro-switch 24VDC	
9614093003	502		DN 20	2							
9614093101	535		DN 15		1			EPDM	PTFE		
9614093103	535		DN 20	2							
9614093008	502		DN 25				2				
9614093008	502		DN 40	4	EPDM		PTFE				
			DN 50								
9614093108	535		DN 40	4	EPDM		PTFE				
		DN 50									

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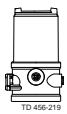

Diaphragm Actuator Stainless steel/Stainless steel						Control unit 8695 and 8691							
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air fittings	Plug Interface	SS/SS		
9614093401	590	NC NO	DN 8	1	EPDM	PTFE		Open and Close	ø6 mm and ¼"	Digital 24VDC			
9614093403	590		DN 15	2									
9614093501	671		DN 20										
9614093503	671		DN 8	1	EPDM	PTFE	Single acting	Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node			
			DN 15	2									
9614093601	841		DN 20										
			DN 8	1	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node			
DN 15	2												
9614093601			841	DN 20									
						<b>H119xW91</b>							
9614093407	727		AA	DN 25	3	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"		Digital 24VDC	
9614093410	699			DN 40	5								
		DN 50											
9614093507	784	DN 25		3	EPDM	PTFE		Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node			
		DN 40		5									
9614093510	784	DN 50											
9614093607	841	DN 25		3	EPDM	PTFE	Single acting	Open and Close	ø6 mm and ¼"	DeviceNet 63 node			
9614093610	809	DN 40		5									
		DN 50											
						<b>H119xW91</b>							
Item No.	PPL EUR	Function		Valves	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air fittings	Plug Interface	SS/SS	
9614093801	612	AA		DN 8	1	EPDM	PTFE		Open and Close	ø6 mm and ¼"	Digital 24VDC		
9614093803	612		DN 15	2									
9614093901	705		DN 20										
9614093903	677		DN 8	1	EPDM	PTFE	Double acting	Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node			
			DN 15	2									
9614093903	677		DN 20										
9614094001	809		DN 8	1	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node			
			DN 15	2									
9614094001	809		DN 20										
						<b>H119xW91</b>							
9614093807	750		AA	DN 25	3	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"	Digital 24VDC		
9614093810	721			DN 40	5								
		DN 50											
9614093907	818	DN 25		3	EPDM	PTFE		Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node			
		DN 40		5									
9614093910	776	DN 50											
9614094007	809	DN 25		3	EPDM	PTFE	Double Acting	Open and Close	ø6 mm and ¼"	DeviceNet 63 node			
9614094010	830	DN 40		5									
		DN 50											

Diaphragm Actuator Stainless steel/Stainless steel						Control unit 8695 and 8691												
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H86xW91	Pilot valve	Position feedback	Air fittings	Plug Interface	C/SS							
9614093401	590	NC NO	DN 8	1	EPDM	PTFE	8695  TD 456-219	1	Open and Close	ø6 mm and ¼"	Digital 24VDC							
9614093403	590		DN 15															
9614093501	671		DN 20	2	EPDM	PTFE												
9614093503	671		DN 8															
9614093601	841		DN 15	1	EPDM	PTFE						8691	Single acting	Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node		
			DN 20															
			DN 8															
9614093407	727		DN 25	3	EPDM	PTFE	H119xW91 8691  TD 456-222	1	Open and Close	ø6 mm and ¼"	Digital 24VDC							
			DN 40															
9614093410	699		DN 50	5	EPDM	PTFE												
9614093507	784		DN 25															
9614093510	784		DN 40	5	EPDM	PTFE												
9614093607	841	DN 50																
9614093610	809	DN 25	3	EPDM	PTFE	Single acting						Open and Close	ø6 mm and ¼"	DeviceNet 63 node				
9614093412	727	DN 40																
		DN 65	6	EPDM	PTFE													
9614093512	784	DN 80													7	EPDM	PTFE	1
9614093612	841	DN 65																
		DN 80	7	EPDM	PTFE													
9614093612	841	DN 65				6	EPDM	PTFE	1	Open and Close	ø6 mm and ¼"	DeviceNet 63 node						
		DN 80																

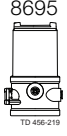
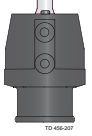





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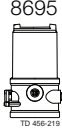




Diaphragm Actuator Composite/Stainless steel						Control unit 8695 and 8691					
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air fittings	Plug Interface	C/SS
9614093801	612	AA	DN 8	1	EPDM	PTFE	8695 	Open and Close	ø6 mm and ¼"	Digital 24VDC	
9614093803	612		DN 15								
9614093901	705		DN 20	1	EPDM	PTFE	Double acting	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
9614093903	677		DN 8								
9614094001	809		DN 15	1	EPDM	PTFE	2	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
			DN 20								
9614093807	750		DN 40	5	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"	Digital 24VDC	
9614093810	721		DN 50								
9614093907	818		DN 25	5	EPDM	PTFE	Double acting 	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
9614093910	776		DN 40								
9614094007	809		DN 50	5	EPDM	PTFE	2	Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node	
9614094010	830		DN 25								
9614093812	750	DN 80	7	EPDM	PTFE	2	Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node		
9614093912	818	DN 65								6	EPDM
9614094012	809	DN 80	7	EPDM	PTFE	2	Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node		

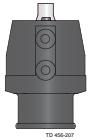


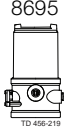



Diaphragm Actuator Composite/Composite						Control unit 8695 and 8691						
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air fittings	Plug Interface	C/C	
9614093401	590	NO	DN 15	1	EPDM	 8695	1	Open and Close	ø6 mm and ¼"	Digital 24VDC	 <small>TD 450-207</small>	
9614093403	590		DN 20	2	EPDM							
9614093501	671		DN 25									
9614093503	671		DN 15	1	EPDM	 Single acting		Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node		
9614093601	841		DN 20	2	EPDM							
			DN 25									
						<b>H119xW91</b>						
9614093408	727		DN 40	4	EPDM	 8691	1	Open and Close	ø6 mm and ¼"	Digital 24VDC		
9614093508	784		DN 50		EDPM							
			DN 40	4	EPDM	 Single acting		Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node		
9614093608	841		DN 50		EDPM							
			DN 40	4	EPDM			Open and Close	ø6 mm and ¼"	DeviceNet 63 node		
		DN 50	EDPM									

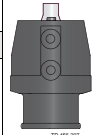
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Diaphragm Actuator Composite/Composite						Control unit 8695 and 8691							
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air fittings	Plug Interface	C/C		
9614093401	590	NC	DN 15	1	EPDM	 8695	1	Open and Close	ø6 mm and ¼"	Digital 24VDC			
9614093403	590		DN 20	2	EPDM							PTFE	
9614093501	671		DN 25										
9614093503	671		DN 15	1	EPDM	 Single acting							
9614093601	841		DN 20	2	EPDM			PTFE					
			DN 25										
9614093601	841		DN 15	1	EPDM	 8691							
			DN 20	2	EPDM		PTFE						
DN 25													
						<b>H119xW91</b>							
9614093407	727		DN 25	3		PTFE	 8691	1	Open and Close	ø6 mm and ¼"		Digital 24VDC	
9614093408	727		DN 40	4	EPDM	PTFE							
9614093410	699		DN 40	5									
9614093408	727		DN 50	4	EDPM	PTFE							
9614093410	699		DN 50	5									
9614093507	784	DN 25	3		PTFE	 Single acting							
9614093508	784	DN 40	4	EPDM	PTFE								
9614093510	784	DN 40	5										
9614093508	784	DN 50	4	EDPM	PTFE								
9614093510	784	DN 50	5										
9614093607	841	DN 25	3		PTFE								
9614093608	841	DN 40	4	EPDM	PTFE								
9614093610	809	DN 40	5										
9614093608	841	DN 50	4	EPDM	PTFE								
9614093610	809	DN 50	5										



Diaphragm Actuator Composite/Composite						Control unit 8695 and 8691						
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air fittings	Plug Interface	C/C	
9614093801	612	AA	DN 15	1	EPDM	 8695	2	Open and Close	ø6 mm and ¼"	Digital 24VDC		
9614093803	612		DN 20	2	EPDM							PTFE
9614093901	705		DN 25									
9614093903	677		DN 15	1	EPDM	 Double acting		Open and Close	ø6 mm and ¼"	AS-Interface v 3.0 62 node		
9614093903	677		DN 20	2	EPDM							PTFE
9614093901	705		DN 25									
9614093901	705		DN 15	1	EPDM	 8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node			
9614093901	705		DN 20	2	EPDM					PTFE		
9614093901	705		DN 25									
						H119xW91						
9614093807	750		DN 25	3		PTFE	 8691  Double acting	2	Open and Close	ø6 mm and ¼"		Digital 24VDC
9614093808	721		DN 40	4	EPDM	PTFE						
9614093810	721		DN 40	5								
9614093808	721		DN 50	4	EDPM	PTFE						
9614093810	721		DN 50	5					PTFE			
9614093907	818	DN 25	3		PTFE	Open and Close				ø6 mm and ¼"	AS-Interface v 3.0 62 node	
9614093908	776	DN 40	4	EPDM	PTFE							
9614093910	776	DN 40	5					PTFE				
9614093908	776	DN 50	4	EDPM	PTFE							
9614093910	776	DN 50	5			PTFE						
9614094007	809	DN 25	3		PTFE			Open and Close	ø6 mm and ¼"	DeviceNet 63 node		
9614094008	830	DN 40	4	EPDM	PTFE							
9614094010	830	DN 40	5			PTFE						
9614094008	830	DN 50	4	EPDM	PTFE							
9614094010	830	DN 50	5			PTFE						

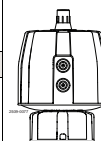


Note: \* AA actuator only available with EPDM

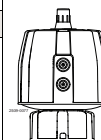
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Diaphragm Actuator Composite/Composite						Control unit 8695 and 8691					DV-P
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air Fittings	Plug Interface	
9614093401	590	NO	DN 15	1	EPDM	PTFE	8695	Open and Close	ø6 mm and ¼"	Sensor system 24VDC	
9614093403	590		DN 20	2							
9614093501	671		DN 15	1	EPDM	PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"	AS-Interface v3.0 62 node
9614093503	671		DN 20	2							
9614093601	841		DN 15	1	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
			DN 20	2							
						<b>H119xW91</b>					
9614093408	727		DN 40	4	EPDM	PTFE	8691	1	Open and Close	ø6 mm and ¼"	Sensor system 24VDC
			DN 50								
9614093508	784		DN 40	4	EPDM	PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"	AS-Interface v3.0 62 node
			DN 50								
9614093608	841		DN 40	4	EPDM	PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"	DeviceNet 63 node
		DN 50									



Diaphragm Actuator Composite/Composite						Control unit 8695 and 8691					DV-P
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air Fittings	Plug Interface	
9614093401	590	NC	DN 15	1	EPDM	PTFE	8695	Open and Close	ø6 mm and ¼"	Sensor system 24VDC	
9614093403	590		DN 20	2	EPDM						
9614093501	671		DN 15	1	EPDM	PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"	AS-Interface v3.0 62 node
9614093503	671		DN 20	2	EPDM						
9614093601	841		DN 15	1	EPDM	PTFE	8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
			DN 20	2	EPDM						
						<b>H119xW91</b>					
9614093407	727		NC	DN 25	3		PTFE	8691	Open and Close	ø6 mm and ¼"	Sensor system 24VDC
9614093408	727			DN 40	4	EPDM					
9614093410	699			DN 50	5		PTFE	1	Open and Close	ø6 mm and ¼"	AS-Interface v3.0 62 node
9614093408	727			DN 40	4	EPDM					
9614093410	699			DN 25	3		PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"
9614093507	784	DN 40		4	EPDM						
9614093508	784	DN 25		3		PTFE	8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
9614093510	784	DN 40		4	EPDM						
9614093508	784	DN 50		5		PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"	DeviceNet 63 node
9614093510	784	DN 40		4	EPDM						
9614093607	841	DN 25		3		PTFE	8691	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
9614093608	841	DN 40		4	EPDM						
9614093610	809	DN 50	5		PTFE	Single Acting	1	Open and Close	ø6 mm and ¼"	DeviceNet 63 node	
9614093608	841	DN 40	4	EPDM							
9614093610	809	DN 50	5		PTFE						





Diaphragm Actuator Composite/Composite						Control unit 8695 and 8691					DV-P
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H124xW66	Pilot valve	Position feedback	Air Fittings	Plug Interface	
9614093801	612	AA	DN 15	1	EPDM PTFE	8695	2	Open and Close	ø6 mm and ¼"	Sensor system 24VDC	
9614093803	612		DN 20	2							
9614093901	705		DN 25	1	EPDM PTFE	Double Acting					
9614093903	677		DN 15	2							
9614093901	705		DN 20	1	EPDM PTFE	8691					
			DN 25	2							
						<b>H119xW91</b>					
9614093808	721		DN 40	4	EPDM PTFE	8691	2	Open and Close	ø6 mm and ¼"	Sensor system 24VDC	
			DN 50								
9614093908	776		DN 40	4	EPDM PTFE	8691					
			DN 50					Open and Close	ø6 mm and ¼"	AS-Interface v3.0 62 node	
9614094008	830		DN 40	4	EPDM PTFE	Double Acting					
		DN 50	Open and Close					ø6 mm and ¼"	DeviceNet 63 node		

