

# Alfa Laval ThinkTop® D30

# Sensing and control

#### Introduction

The Alfa Laval ThinkTop® D30 is a basic, easy-to-install valve control unit for fluid handling in hygienic

applications. A compact, cost-effective alternative to external solenoid valves, it is ideal for use where space is limited, and operational simplicity and reliability is important. ThinkTop D30 simplified solution for Alfa Laval hygienic valves.

#### Application

The Alfa Laval ThinkTop D30 is designed for use in hygienic applications across the dairy, food, beverage, biotechnology, pharmaceutical and many other industries.

#### **Benefits**

- No-hassle intuitive control unit
- Easy-to-install, plug-and-play
- 360° LED indication and compact design to fit wherever space is limited
- Cost-effective alternative to using external solenoid valves
- Reliable, optimized hygienic design and easy to operate

# Standard design

The ThinkTop D30 valve control unit consists of a proven, air pressure sensor system with 360-degree LED visual status indicator, an integrated 3/2-way solenoid valve for a springloaded actuator, and a valve control board for connection to all major programmable logic controller (PLC) systems with a digital PNP interface. It fits on most Alfa Laval hygienic valves; no adapter is required. For more details check table with compatible valves.

Installation onto the top of the valve is straightforward. No special expertise or tools are required. No manual pushbutton setup. Simply plug and play the ThinkTop D30.

#### Working principle

The Alfa Laval ThinkTop D30 valve control unit is fitted with one solenoid valve that can convert compressed air and the electrical PLC signal into mechanical energy to activate or deactivate the spring-loaded pneumatic valve actuator. The air pressure sensor system sends signals to the PLC system to activate or deactivate the pneumatic valve actuator.

Each control unit and its air pressure sensor fit most Alfa Laval hygienic valve. This eliminates the need to re-adjust the sensors and boosts productivity.



360° LEDs conveniently display the main valve position, solenoid activation and local fault indication on the control unit.

Certificates



# **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:	P66 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

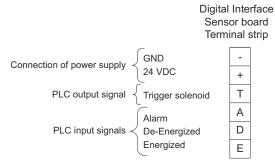
## Accessories

- 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

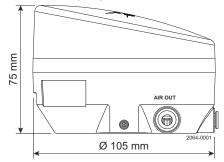
# Compatible valves

ARC	Yes	SBV	Yes
SRC	Yes	Koltek	Yes
Unique SSV	Yes	SMP valves	Yes
i-SSV	Yes	DV-ST ≤ DN50	Yes
LKLA-T	Yes	Unique Mixproof	No
LKLA	No	Unique SSV Long Stroke	No
Air/Air actuator	No	Unique SSV High pressure DN80 - DN100	No
		SRC Long stroke	No
		Unique SSV DN125 - DN150	No

#### **Electrical connection**



## **Dimensions (mm)**



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