

Alfa Laval ThinkTop® D30 Digital

Ensures basic valve control for fluid handling in hygienic applications

Introduction

The Alfa Laval ThinkTop® D30 Digital 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 Digital offers a simplified solution for Alfa Laval butterfly and single-seat valves.

Application

The Alfa Laval ThinkTop D30 Digital 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 Digital 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 spring-loaded actuator, and a valve control board for connection to all major programmable logic controller (PLC) systems with a digital PNP interface. It fits on all Alfa Laval hygienic valves; no adapter is required.

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

Working principle

The Alfa Laval ThinkTop D30 Digital 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 any 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 ² (AWG 20)	

Note!

For further information: See also ESE02248

Options

- Pneumatic tubing interface

Accessories

- Various cable options
- Elbow pneumatic fittings for adapting various tubingThreaded 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	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

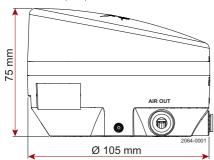
Electrical connection

Digital Interface Sensor board Terminal strip

Connection of power supply $igg\{$	GND 24 VDC
PLC output signal $\{$	Trigger solenoid
	Alarm
PLC input signals <	De-Energized
	Energized

-+ T A D

Dimensions (mm)



Alfa Laval reserves the right to change specifications without prior notification.