



Leave Surveillance to the Top

Alfa Laval ThinkTop® D30 Digital 24 VDC PNP

Concept

The ThinkTop® D30 is designed to ensure valve control in a basic market using Alfa Laval air operated actuators such as butterfly, single and double-seat valves. It is compatible with all major PLC systems (Programmable Logic Controller) with a digital PNP interface. It is for use in food, dairy and brewery installations. ThinkTop D30 is a complementary, alternative solution to the existing range of control units.

ThinkTop D30 is the first of its kind on the market that focuses on new methods to simplify all aspects of using a basic control unit to minimise and optimise installations instead of using external solenoid valves.

Working principle

The ThinkTop D30 is an easy-to-use plug 'n play control unit with integrated intelligence which monitors the status of the operating air pressure, identifying air leakage or failing air pressure. The integrated solenoid valve allows control of the processing valve. Mounted on top of the valve, the unit receives signals from a PLC system to control the solenoid valve and it returns the supervised air pressure signals for valve energized or de-energized to the PLC system. ThinkTop D30 has a 360 degree visual valve status indicator, which can be seen at a distance and at any angle.



TECHNICAL DATA

Communication

Interface option 1 Digital 24 VDC PNP
 Supply voltage 24 VDC ± 10%, 1 W

Sensor board

Interface Digital
 Feedback signal #1 De-energized valve
 Feedback signal #2 Energized valve
 Feedback signal #3 Alarm

Solenoid valve

Supply voltage 24 VDC ± 10%, 1 W
 Air supply 400-700 kPa (4-7 bar)
 Air supply 58-101.5 psi (4-7 bar)
 Type of solenoid 3/2-ways NC
 Number of solenoids 1
 Manual override Yes
 Push-in fittings ø6 mm

Cable connection

Main cable gland entry PG7 (ø4 - ø6.8 mm)
 Main cable gland entry PG7 (ø0.16 - ø0.27 in)
 Recommended wire diameter 0.5 mm² (AWG 20)
 Recommended wire diameter 0.02 in² (AWG 20)

PHYSICAL DATA

Materials

Composite parts Black Nylon PA 6
 Steel parts Stainless Steel
 Seals Nitrile (NBR) rubber
 Light guide Transparent polyamide

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

Environment

Operating temperature 10°C to +50°C
 Operating temperature 50°F to +122°F
 Protection class IP66 and IP67

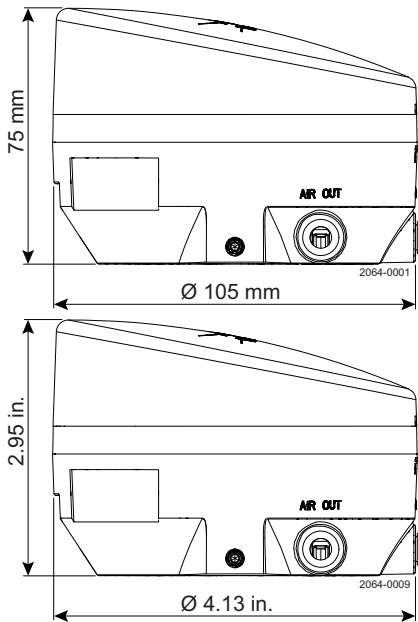
Electrical connection

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

Typical Power Consumption ThinkTop D30

Test conditions = One ThinkTop D30 connected with 1 feedback active (on) and
1 solenoid valve active Supply voltage 24 VDC 39 mA

Dimensions



Ordering

Please state the following when ordering:

- Push-in fittings angle-type $\varnothing 6$ mm / 1/4" Item no. 9611995679
- Push-in fittings angle-type $\varnothing 6$ mm / $\varnothing 6$ mm Item no. 9611995678

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