



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 mm² (AWG 19)

Note!

For further information: See also ESE00225

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



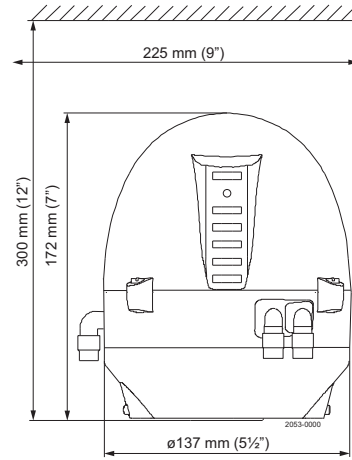
Options

- Communication interface
- Solenoid valve configuration
- Pneumatic tubing interface

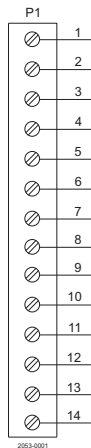
Accessories

- 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) |

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How to contact Alfa Laval

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