

PHÖNIX CONTROL

— Founded 1981 —



Level Indicators



Transmitters



Switches



Flow Meters

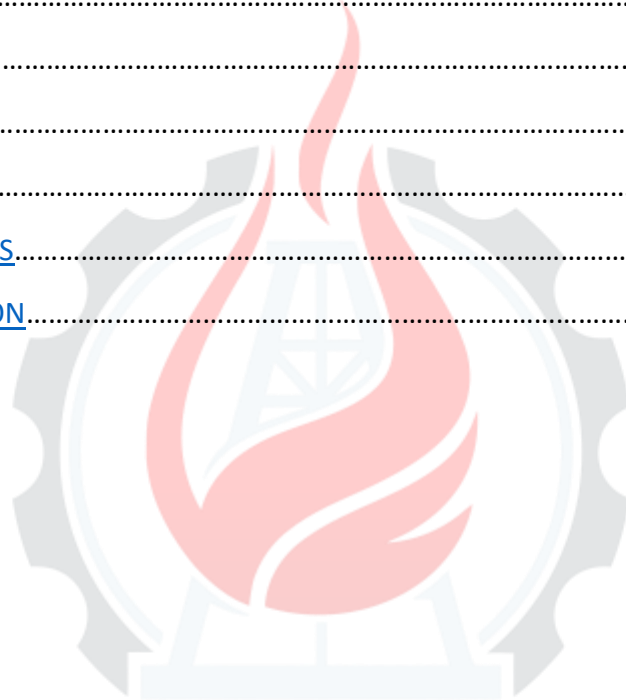


Safety Equipments



Accessories

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تجهیز انرژی باختر

TAJHIZ ENERGY BAKHTAR

Introduction

The Phonix Control Limited Company was founded in 1981 as a private venture.

From the beginning it manufactures liquid level measurement products for the oil, chemical and pharmaceutical industry, as well for different areas of the energy sector.

From 1992 the company became a standard and continuous supplier for the nuclear industry sector.

From the mid-90's it participates in the biggest Hungarian and international tenders.

From 2005 as a result of own product developments new products were put into the product list in the area of safety equipments.

The company is continually involved in many domestic and international tenders with own manufactured products and services.

Head Office

Hungary

Website

www.phonixcontrol.hu



تجھیز انر
R G Y B A K H T A R

Similar brand's names

- Phoenix controls (HONEYWELL)



FIELD OF WORK: Phoenix Controls contributes to the safety, simplicity, and sustainability of your critical environment.

LIST OF PRODUCTS: Valves and controllers , Electronics, peripherals & accessories , Software & integration

- Phoenix contacts



FIELD OF WORK: Connecting, distributing, and controlling power and data flows. USA brand

LIST OF PRODUCTS: AUTOMATE , CONNECT , MARK, ASSEMBLE, AND INSTALL , SUPPLY, CHARGE, AND PROTECT , SWITCH, MEASURE AND MONITOR

- Phoenix control systems limited



FIELD OF WORK: Provides All-In-One Industrial Control Systems. UK brand

LIST OF PRODUCTS: Control Panel Manufacturer , PLC Systems , Conveyor Control Systems , HVAC Control Panels , SCADA Systems

Competitors



- **SIGHT LEVEL INDICATORS:** Wika, Shridhan, Honeywell, Bonetti
- **MAGNETIC LEVEL INDICATORS:** Wika, Krohne, Emerson, ABB, Vega, Ametek, E+H, P+F, Bonetti
- **TRANSMITTERS (LEVEL TRANSMITTER):** Honeywell, ABB, Krohne, Rosemount, Wika, E+H, P+F, Yokogawa, Delta Mobrey, Siemens
- **FLOAT SWITCHES:** Wika, E+H, P+F, Honeywell, Delta Mobrey
- **LIMIT SWITCHES:** Wika, E+H, P+F, Honeywell, Yokogawa
- **FLOW METERS:** E+H, Krohne, Honeywell, ABB, Emerson, Siemens, Yokogawa

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Potential customers

- Oil industry
- Chemical industry
- Pharmaceutical industry
- Different areas of the energy sector
- Nuclear industry sector
- Safety equipment inquired areas

Iranian customers

Marun Petro (END USER)- Fanavaran Petro (END USER)- Petro Arses (SUPPLIER)

Behbood Farayand (SUPPLIER) - Petro Tamin (SUPPLIER) - Tavan Sazan(ENG, SUPPLIER) - Nargan (EPC)



List of products in brief

- Level Indicators



- Transmitters



- Switches



- Flowmeters



- Safety Equipments



- Accessories



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AJHIZ ENERGY BAKHTAR

Products with details:

- **Level Indicators**

- **Magnetic Level Indicators**



- **0-16 bar 710 098**

Magnetic indicating bar scale with fine resolution, indirect level indication
Indicating elements permanent magnetic with stop pin
Fully closed housing with gapless weldings
Float magnet field totally circular with strong far field
Float defect control with indication in lower display end

- **0-40 bar 710 100**

Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

- **0-40 bar 710 104**

Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

- **0-40 bar 710 110**

Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

- **0-100 bar 710 120**

Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

- **0-160 bar 710 130**

Magnetic indicating bar scale with fine resolution, indirect level indication
Indicating elements permanent magnetic with stop pin
Fully closed housing with gapless weldings
Float magnet field totally circular with strong far field
Float defect control with indication in lower display end

- **0-250 bar 710 140**

Magnetic indicating bar scale with fine resolution, indirect level indication
Indicating elements permanent magnetic with stop pin
Fully closed housing with gapless weldings



Float magnet field totally circular with strong far field
Float defect control with indication in lower display end

- **0-16 bar 710 102 For Acid**

Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

- **0-40 bar 710 22X Top**

Magnetic indicating bar scale with fine resolution, indirect level indication
Indicating scale above containment
Indicating elements permanent magnetic with stop pin
Float magnet field totally circular with strong far field
Float defect control with indication in lower display end

- **0-400 bar 710 300 Bottom**

- **710 Book**

- **Magnetic Level Indicators accessories**

- **Sight Level Indicators**

- **0-16 bar 700 01XX**

Connection top-bottom pivoted
Offset, handwheel
Glass protection

- **0-40 bar 700 12XX**

Light execution
Reflex, Transparent
Connection side-side fixed
Connection gauge valve to gauge chamber: union
Hand wheel

- **0-40 bar 700 21XX**

Light execution
Reflex, Transparent
Connection top-bottom pivoted
Connection gauge valve to gauge chamber: union
Offset, handwheel

- **0-100 bar 700 37XX**

Heavy duty execution
Reflex, Transparent
Connection side-side fixed
Connection gauge valve to gauge chamber: union
Handwheel

- **0-100 bar 700 53XX**

Heavy duty execution



Reflex, Transparent
Connection top-bottom pivoted
Connection gauge valve to gauge chamber: union
Offset, handwheel

- **0-250 bar 700 26XX**

- **0-250 bar 700 27XX**

"Cold" High pressure
Reflex, Transparent
Connection top-bottom pivoted
Connection gauge valve to gauge chamber: union
Offset, handwheel

- **0-100 bar 700 39XX**

- **700 Book**

- **Sight Level Indicators accessories**

- **Transmitters**



- **746 1XX Transmitter**

Level sensor using a magnetic float to operate reed switches in a resistive chain to give a dis-continuous output
3-wire resistance transmitter or
2-wire 4-20 mA transmitter with integrated R/I-converter, HART
Materials in contact with media hermetically sealed

- **746 2XX**

- **Nuclear Transmitter**

- **745.1XXE**

- **745.200XE**

- **745 300XE**

- **746 3XXE**

- **Switches**



- **719 010X**

- **719 0021**

Float switch with single or multiple
Reed switches, including bistable types
PN16 to PN64

Threaded connection from 2", Flange connection from DN50/ANSI 2"
All parts in contact with media are hermetically welded on demand



- **Nuclear switch**

- **719 B11X**



- 720.0020E
- 740 0062E
- 740.0065E
- 740.0066E

- **Flow Meters**

- **Short Venturitube**
- **BRV 109 rotameter**

Flow measuring of liquids and gas
 Can be used in the chemical industry or in medical or laboratory engineering.
 Precision, reliability and efficiency are the remarkable features of this device.
 Robust mechanical system with a low rate of wear
 Extremely compact design



- **BRV 112 rotameter**

Flow measuring of liquids and gas
 Can be used in the chemical industry or in medical or laboratory engineering.
 Precision, reliability and efficiency are the remarkable features of this device.
 Robust mechanical system with a low rate of wear



- **BRV 131 rotameter**

Housing in stainless steel
 Borosilicate glass
 Only 4 Sealing rings
 Service kind construction
 Limit switches (Options)
 Chip guard

- **BRV 132 rotameter**

Flow measuring of liquids and gas
 Can be used in the chemical industry or in medical or laboratory engineering.
 Precision, reliability and efficiency are the remarkable features of this device.
 Robust mechanical system with a low rate of wear



- **BRV 133 rotameter**

Flow measuring of liquids and gas
 Horizontal and vertical mounting possible
 Robust design with measuring ring and conical-shaped float
 Linear characteristic thanks to optimized float
 Clear 90°-scale



- **BRV 109E**

- **Safety Equipments**

- **Sight Flow indicators transparent/reflex**



- **BRV BTE Security breaker**

Our product is to ensure facilities for safe pumping where the sender or the host should be mobile or stationary. When there is an ambitious move the security element will automatically solve, thereby preventing the factory emergency, during which the system is hermetically isolated from the environment.



- **BRV BV Non return valve**

Our product is designed for a goal-oriented one-way valve system which is using the forced flow, as well as prevent the return of the medium.

- **BRV 941 Liquid locked flame arrester**

- **BRV 942 Flame arrester**

- **BRV 943 Detonation arrester**

- **BRV 945 In Out Breather**

Our product is made with a specially designed inside part to enable for the storage tanks to equalize either vacuum or overpressure

- **BRV 946 Flanged In Out Breather**

Our product is designed for a goal-oriented use of the tank valve or the system created a high degree of pressure away.

- **BRV TM Rotating pipe wrist**

Our product is designed for a goal-oriented mechanism for rotational join of pipes for the oil and gas pipelines negotiable axis direction makes all the fluid with hermetic insulation from the environment. The tool allows the flexibility of the system with significant increase.

- **ACCESSORIES**

- **Welded thermowell**

- **Flanged thermowell**

- **Screw termowell**

- **Special Float 32 mm**

- **Special Float 57 mm**

- **Calibrated Scale**

- **Data Plate drawing**

- **LED Lighting E22**

- **Phonix Valve**

- **Opeartion and Mainten Manual 700.XXXE**

- **Operation and Maintenance manual 710.XXXE**

- **Operation and Maintenance Manual 745 746.1XXXE**

SOME TECHNICAL INFORMATION:

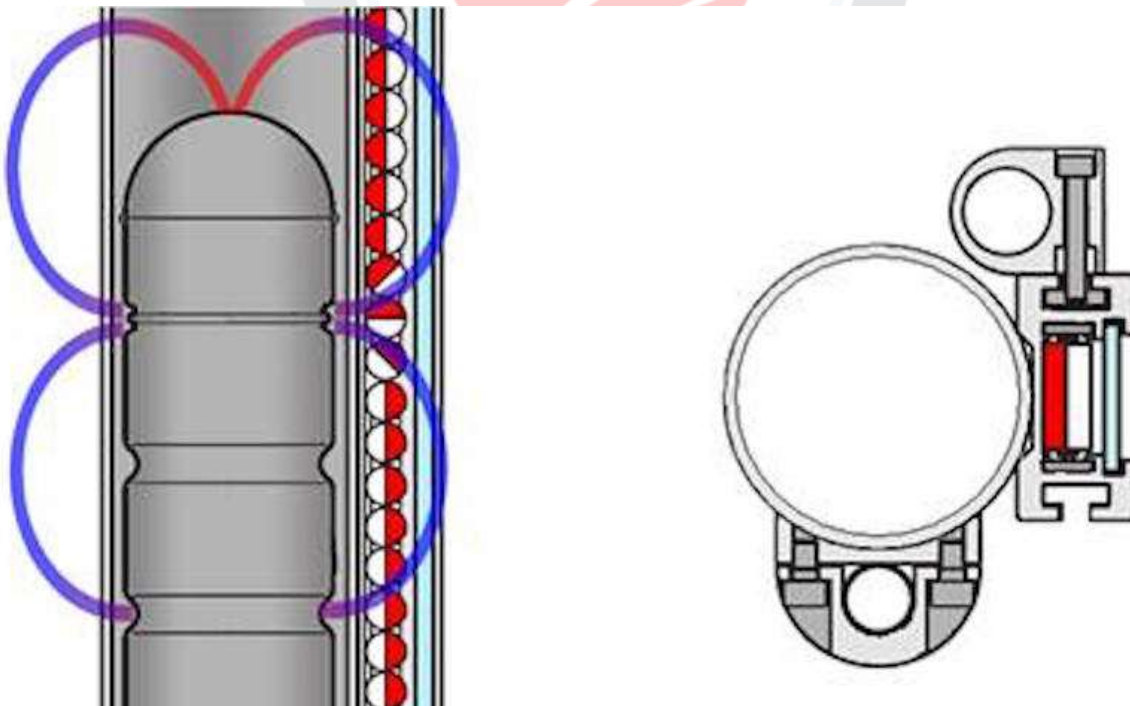
WHAT ARE THE LEVEL INDICATORS?

Level indicators are used for continuous indication of the level. The functional principle is based on a magnet connected to a float transmitting the level, without an additional supply voltage, to an indicator bar that consists of magnetic rollers or flaps. In addition, various magnetic switches and level sensors can be fitted as additional accessories.

WHAT ARE MAGNETIC THE LEVEL INDICATORS?

The magnetic level indicator working principle is widely used in level instrumentation. The interaction between float magnets inside the chamber and magnetic flags outside the chamber provide virtually maintenance-free, continuous level information. This type of level indicator doesn't require power, making it ideal for a variety of applications across industries.

The magnetic level indicator working principle is based on the effects that one magnet has on nearby magnets. The mechanics are simple yet very effective, yielding reliable and repeatable level information for continuous monitoring and recording of fluid levels.

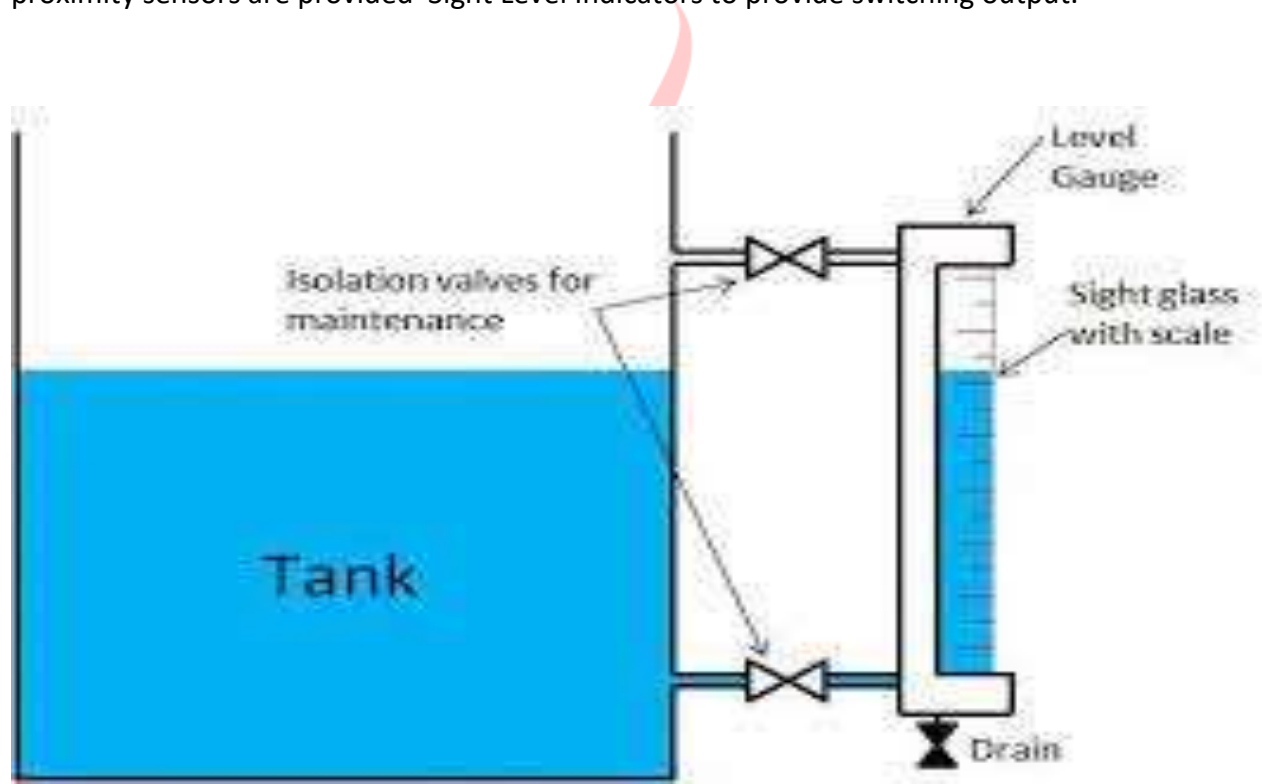


RELATED YOUTUBE VIDEO:

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WHAT ARE THE SIGHT LEVEL INDICATORS?

Sight Level Gauges are used for visual indication of liquid operation in a process. Different variants are available for variety of applications, Level Indicators is one of the simplest visual indicator which works on the principle of float buoyancy. Reed proximity sensors or Inductive proximity sensors are provided Sight Level Indicators to provide switching output.



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ADVANTAGE OF MAGNETIC LEVEL INDICATORS OVER SIGHT LEVEL INDICATORS:

The magnetic level indicator is now widely used throughout process industries as an effective visual indicator.

A magnetic level indicator is often used in applications where a sight glass (or glass sight gauge) is either ill-suited based on process variables or is underperforming based on plant requirements. These can include enhanced safety for personnel; environmentally risky situations including media leakage or fugitive emissions; need for maintenance reduction; or need for high visibility from a distance. Typical shortcomings of glass sight gauges include:

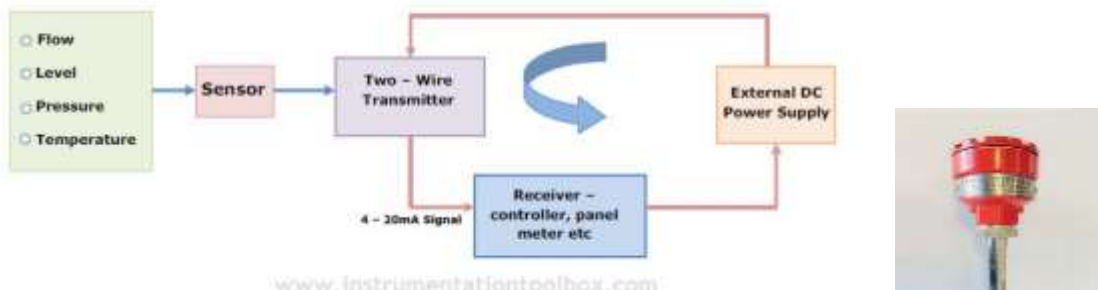
- High pressures, extreme temperatures, deteriorating seals/rings/gaskets, and toxic or corrosive materials may cause a risk of fugitive emission of dangerous substances.
- The glass in a sight glass can become quickly discolored, thus decreasing level visibility, or it can acquire microfractures, which can become a personnel safety issue if left undetected.
- Liquid/liquid interfaces can be very difficult to read in a sight glass particularly if the liquids are of similar color. Clear liquids can also be difficult to see in a sight glass.
- Liquids that tend to coat or build-up on surfaces can hinder visibility by forming an opaque film on the glass.
- To cover a large measuring span, sight glass assemblies typically must be staggered using multiple sections.

The key reasons for selecting a magnetic level indicator over a sight glass are:

- Improved safety due to the absence of fragile glass and a substantially reduced number of potential leak points.
- Greatly increased visibility.
- Reduced maintenance.
- Easier initial installation and addition of transmitters and switches without interrupting the process.
- Dual-technology redundancy, with the addition of transmitters or switches, for improved safety.
- Lower long-term cost of ownership and legitimate return-on-investment benefits.
- Single chamber measurement over 20 ft. (6 m) without staggering chambers.

WHAT ARE THE TRANSMITTER?

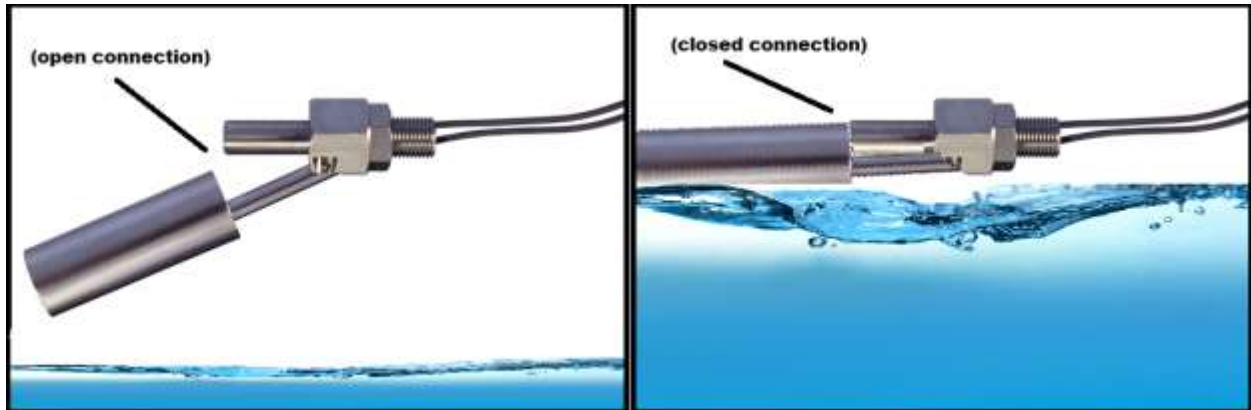
A transmitter is an electronic telecommunications device used for transmitting data. Transmitters (also known as radio transmitters) generate radio waves from an antenna and use them to send and receive data. The purpose of radio transmitters is the communication of information over a distance.



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WHAT ARE THE FLOAT SWITCHES?

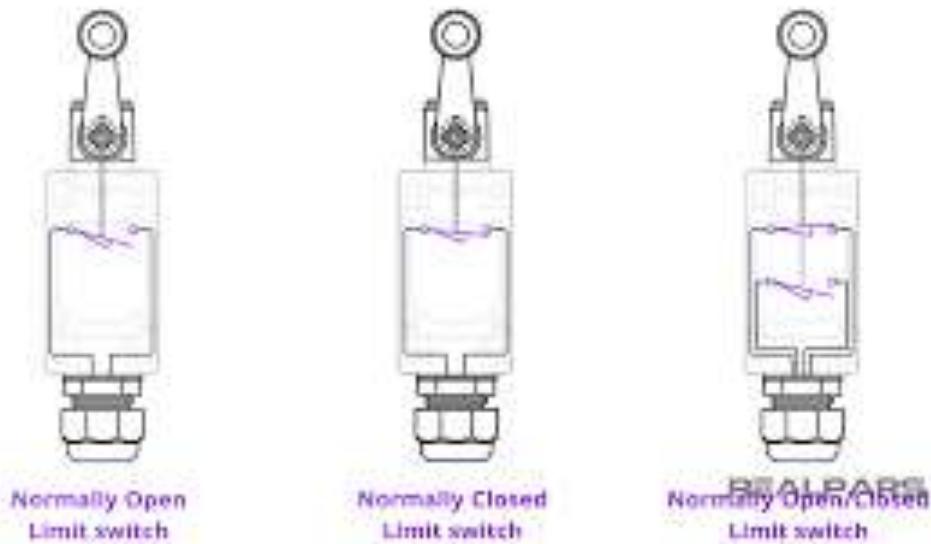
A float switch is a type of contact liquid level sensor that uses a float to operate a switch. Float switches are commonly used to control other devices such as alarms and pumps when a liquid level rises or falls to a specific point.



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WHAT ARE THE LIMIT SWITCHES?

A Limit Switch is a detection switch which consists of a basic switch in a metal or resin case. The strong outer case protects the inside of the switch from external forces, moisture, oil, dust and dirt so that it can be used in locations that demand mechanical strength and environmental resistance.

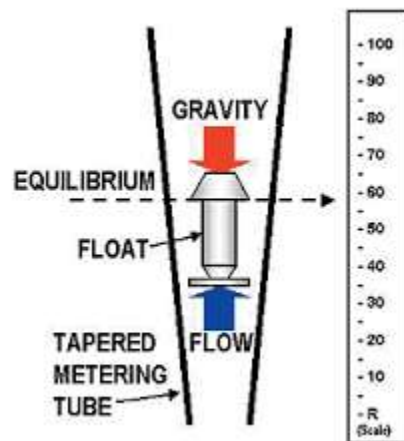


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WHAT ARE THE ROTAMETERS?

A rotameter is a device that measures the volumetric flow rate of fluid in a closed tube.

It belongs to a class of meters called variable-area flowmeters, which measure flow rate by allowing the cross-sectional area the fluid travels through to vary, causing a measurable effect.



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