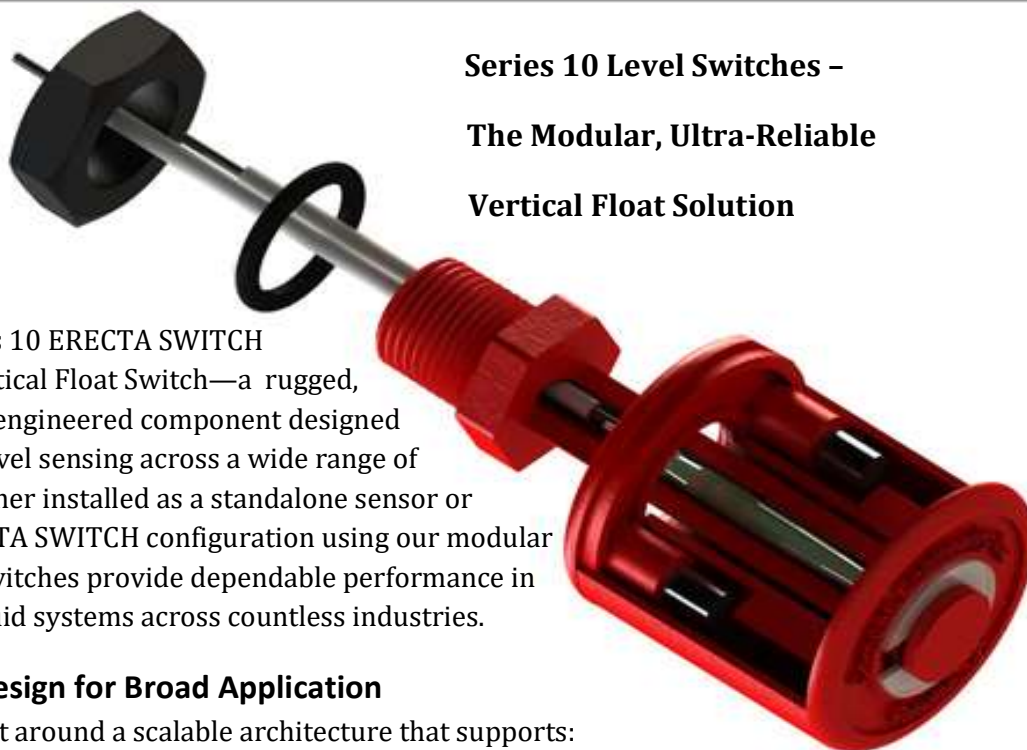




Series 10 Level Switches – The Modular, Ultra-Reliable Vertical Float Solution

At the heart of the Series 10 ERECTA SWITCH family is the 10-782 Vertical Float Switch—a rugged, compact, and precision-engineered component designed to offer reliable liquid level sensing across a wide range of OEM applications. Whether installed as a standalone sensor or integrated into an ERECTA SWITCH configuration using our modular accessories, Series 10 switches provide dependable performance in tanks, reservoirs, and fluid systems across countless industries.

Versatile, Modular Design for Broad Application

The Series 10 line is built around a scalable architecture that supports:

- Single-Point Vertical Level Switches for basic monitoring tasks
- Side-Mounted Level Switches for horizontal tanks or compact enclosures
- Extended Stem Switches (1" to 70") for multi-level sensing across large tanks
- Multi-Level Float Switches (2 to 4 levels) for systems requiring complex logic or redundancy
- Level & Temperature Combination Switches to simplify instrumentation and control panel loads

Each configuration begins with the 10-782 switching element, which features a hermetically sealed magnetic reed switch actuated by a precision-fit float that rises or falls with fluid level. The float's motion is virtually frictionless thanks to our square-stem profile, which minimizes contact area and prevents sticking—especially valuable in viscous or contaminated liquids.

Broad Chemical Compatibility with Three Proven Plastics

To serve the widest possible range of liquid media, Series 10 level switches are manufactured in Polypropylene (PP), Acetal (AC), and PVDF Kynar (KR):

- Polypropylene (PP) – Ideal for water, soaps, and light acids
- Acetal (AC) – Engineered for hydrocarbons like gasoline, diesel, and hydraulic oil
- PVDF Kynar (KR) – Trusted for corrosive chemicals, acids, caustics, and chlorine-based solutions

Engineered for OEM Efficiency

With over 50 years of OEM experience, Compac Engineering delivers more than just a switch—we deliver a solution. Every Series 10 product is designed for fast integration, low lifecycle cost, and high serviceability:

- Built-in Stress Relief – Reduces lead wire failure and protects the reed switch during install and service
- Hollow Smooth Surface Float – Ensures easy cleaning in sanitary or food-grade environments
- Slosh Shield Options – Maintain accuracy in turbulent tank conditions
- No-Thread Mounting & Field Access Options – Speed installation and simplify maintenance

Every part in a Series 10 assembly is sold individually, meaning you can service, replace, or modify units in the field without scrapping the whole switch—unlike many competitors' welded or potted designs.

Wide Application Footprint

Series 10 level switches are found in:

- Soft drink dispensers
- Bottled water stations
- Coffee and ice cream machines
- Chemical baths and photo developers
- Equipment lubricators and fuel tanks
- Dishwashers and food warmers
- Poultry feeders and agricultural tanks

Their small size and robust design make them the preferred solution for OEMs needing cost-effective, compact, and modular liquid level sensing across a diverse set of environments.

Why Choose Series 10?

- Compact form factor, powerful functionality
- All configurations available as preassembled sets with part numbers, drawings, and pricing—no need to custom-spec
- High-reliability Oki reed switches and precision-ground Alnico magnets for long service life
- No minimum order quantities, fast lead times, and free sampling available

Get the advantage of Compac's ERECTA SWITCH platform and turn your level sensing into a design asset instead of a design burden. Choose Series 10 for reliable sensing, easy installation, full modularity, and unmatched chemical compatibility—built for OEMs that don't settle.

PAGE 201

MODES OF OPERATION

The switch action of the 10-782 can be configured for either normally open or normally closed switch action depending upon the orientation of the float on the stem. The product is shipped with the float in the "magnets up" normally closed condition. To reverse this action, remove the float and retaining ring, turn the float over and reassemble the float and retaining ring.

FLOAT BUOYANCY IN SPECIFIC GRAVITY 1.0						
Float	Inches			MM		
	PP	AC	KR	PP	AC	KR
Exposed	.4	.35	.2	10.16	8.89	5.08
Submerged	.6	.65	.8	15.24	16.51	20.32
Height	1.0	1.0	1.0	25.4	25.4	25.4

ELECTRICAL RATING

KOFU

A STANDEX ELECTRONICS JAPAN BRAND

Contact life ORD229 Data Sheet: <https://standexelectronics.com/technical-library/technical-papers/datasheet-reed-switch-ord229>

Contact rating **70 VA*, 50W*** *Resistive
Standex Electronics Japan Corporation
1088-7, Otsu-machi, Kofu-shi
Yamanashi, 400-0055, Japan

UL file

E70063

Max Switching Voltage 300AC, 350DC

Max Switching Current AC 0.5AMP*, DC 0.7AMP*

APPLICATION ENVIRONMENT

Pressure (Hollow float)	100 PSI MAX @ 20°C	Derate, Zero @ 90°C
Temperature	90°C MAX	---
Specific Gravity	.8 MIN	Clear Liquid
Position Extreme	30° Cant MAX	Off Vertical

* UL component recognition applies to the OKI switch Model ORD229. Observe applicable electrical codes when using this product.

TRIP POINT (DRY STATE BEHAVIOR)

NORMALLY CLOSED— Legend toward retaining ring. Switch opens as float approaches the hex and closes as float approaches the retaining ring at the opposite end.

Contacts open when the gap between float and retaining ring is increased to not more than .250/.635 and recloses when gap is not less than .125/.318. The characteristic differential between open and closed states is .030/.762

NORMALLY OPEN— Legend toward hex. Switch opens as float approaches the retaining ring and closes as the float approaches the hex at the opposite end.

Contact closes when gap between float and hex is not less than .125/.318 and reopens when gap is increased to not more than .250/.635. The characteristic differential between open and closed states is .030/.762.

MATERIALS OF CONSTRUCTION

10-782-PP	(Gray & black) Polypropylene
10-782-AC	(Red) Acetal
10-782-KR	(Natural) Kynar PUDF

MODES OF FAILURE

Stuck closed contacts are symptomatic of welded contacts. Contacts will weld and then stick whenever the power switched is greater than the reed's ability to handle the load. Any stick is indicative of a catastrophically damaged, overloaded reed contact. Reed switch contacts are vulnerable to such damage when subjected to reactive loads. When switching solenoid and relay coils, include arc suppression in your circuit. See "Is Arcing Present" in Tech Note section in this catalog.

Stuck open contacts are symptomatic of a stressed or otherwise broken switch. Avoid dropping the switch or bending it during the installation process.

04-14-06 G782-3