

Series 15 Side Mount Level Switches

PRODUCT OVERVIEW



15-650-AC shown — Series 15 side mount level switch

The Series 15 consists of two injection-molded sections: a housing containing a sealed glass magnetic reed switch, and a float section containing a permanent magnet, hinged together by an integral clevis mechanism.

Move the float toward the housing: it “clicks” on. Move it away: it “clicks” off. The centerline-symmetrical design installs **outside-in** or **inside-out** through a bulkhead hole. Units are supplied with nut and O-ring to accommodate inside-out mounting.

A full range of ERECTA SWITCH® components extends the installation possibilities for virtually any OEM side mount requirement.

Why Series 15 for OEM?

- Features of switches costing 100–500% more
- Precision injection-molded components — manufactured under statistical process control
- Reliable hermetically sealed-in-glass reed contacts
- Outside-in or inside-out installation
- Full ERECTA SWITCH® accessory compatibility
- Relay output models eliminate need for external relay
- UL component recognition program — RoHS compliant

Series 15 — Side Mount Product Line

Model	Description	Key Feature
15-650	Standard side mount switch	PP/AC/KR · N.O. or N.C.
15-650-R	With integrated relay output	Series 50 relay — direct load control
15-650-LP	LatchPac latching relay version	Wide differential pump control
15-650-AC5	External 50-NP-AC5 relay	15A DPDT for motor/valve loads
15-600-AD	Adjustable differential	Field-adjustable deadband
15-650S	High-volume OEM version	100-pack only — website

ELECTRICAL, MATERIALS & OPERATING ENVIRONMENT

Electrical Rating

ELECTRICAL RATING	
 	
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*, 50A* *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*

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

Standex/OKI ORD229 — UL File E70063

Trip Point Summary

Normally Closed: Opens when gap reaches **0.015"/0.381 mm** or greater (float heel to hard point). Recloses at the same gap (clevis floor to hard point). Differential: 0.50"/12.7 mm arc excursion.

Normally Open: Closes when gap reaches **0.015"/0.381 mm** or greater (clevis floor to hard point). Reopens at the same gap (float heel to hard point). Same 0.50" differential.

See the *Series 15 Operating Principle* document for point-of-operation diagrams and contact-condition behavior.

Materials of Construction

MATERIALS OF CONSTRUCTION	
15-650-PP	(Gray) Polypropylene
15-650-AC	(Red) Acetal
15-650-KR	(Natural) Kynar PUDF



PP — Gray



AC — Red



KR — Natural

Application Environment

APPLICATION ENVIRONMENT		
Pressure (Hollow float)	50 PSI MAX @ 20°C	Derate, Zero @ 90°C
Temperature	90°C MAX	---
Specific Gravity	.8 MIN	Clear Liquid
Position Extreme	15° Cant MAX	Off center

Pressure, temperature, SG, and cant-angle limits

MOUNTING & INSTALLATION

Thread Configurations

The 15-650 offers two mounting threads:

1/2 NPT — outside-in mounting. Standard for ERECTA SWITCH® receptacles, audible alarms, and conduit fittings.

1/4 straight thread — inside-out mounting to threaded bulkheads. Tank bulkheads can be drilled and tapped accordingly.

With PTFE tape applied to the threads prior to assembly, mounting on its own threads makes a clean, uncluttered installation. PVC, polypropylene, and fiberglass bulkheads are easily drilled and tapped using common hand tools.

Sealing & Torque Note

Apply two wraps of PTFE tape prior to installation.

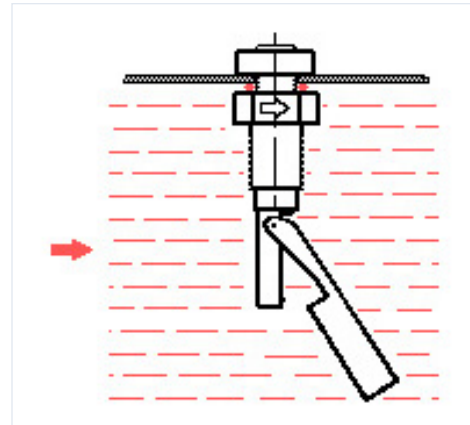
Effective seal: minimum four full turns past hand-tight, not more than five additional.

Excessive torque causes cold-flow in plastic parts and can upset magnetic properties of the sensing switch.

Thin-Wall Tank Option

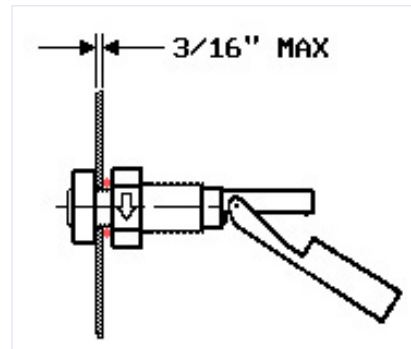
For sheet metal or thin-wall plastic tanks where sealing on tapered threads is impractical, punch a hole through the bulkhead and mount using the 1/4" straight thread with D-ring seal and jam nut. Suitable for bulkheads up to 3/16" (4.76 mm) thickness.

Tank Installation



Outside-in installation with multiple switch positions

Thin-Wall Bulkhead Detail



1/4" thread with D-ring seal — max 3/16" wall thickness

OEM APPLICATIONS & RELAY OUTPUT MODELS

OEM Application Reference

Application	Model	Material	Notes
Side tank (no top access)	15-650	PP/KR	Outside-in or inside-out
Pump ON/OFF control	15-650-LP	PP/AC	LatchPac maintains state
High-load valve/motor	15-650-AC5	PP/KR	50-NP-AC5 handles 15A
Electroplating bath	15-650	KR	Kynar for acid baths
HVAC expansion tank	15-650	PP	Water/glycol service
Fuel tank monitoring	15-650	AC	Diesel/petroleum
Chemical day tank	15-650-R	KR	Integrated relay output
Adjustable pump control	15-600-AD	PP/AC	Field-adjustable deadband
High-volume OEM	15-650S	PP	100-pack only — website

Relay Output Models

15-650-R — Integrated Relay. Reed switch pilots an integrated Series 50 solid-state relay. SPDT output at 10 A / 240 V AC for direct valve or pump control. No external relay required.

15-650-LP — LatchPac. Latching relay output maintains state after the level event. Wide-differential control: one switch latches ON, a second unlatches OFF. Pump control without a PLC or timer.

15-650-AC5 — External 50-NP-AC5. Controls an external 50-NP-AC5 NistorPac® relay module (sold separately). DPDT at 15 A / 240 V AC for motor starters and high-load contactors. 120 V AC pilot supply to relay module required.

Contact Protection Note

Base models (15-650, 15-600-AD) require external contact protection when switching inductive loads.

All relay-output variants are rated for direct inductive switching.

See Engineering Library: “Reed Switch Contact Protection”.

Chemical Compatibility

Material	Ideal Service
PP — Gray Polypropylene	Water, aqueous solutions, soaps, mild alkalis
AC — Red Acetal	Hydrocarbons, diesel, oil, petroleum
KR — Natural Kynar PVDF	Acids, caustics, chlorinated compounds, high-purity

Packaging

Configuration	Availability
1-Pack	All models except 15-650S
100-Pack	15-650S only — website
100-Pack (other)	Standard models — order desk only
OEM Volume (100+)	Quoted at sales@compac.com

For OEM volumes above 99 units, contact sales@compac.com for quoted pricing and lead times.