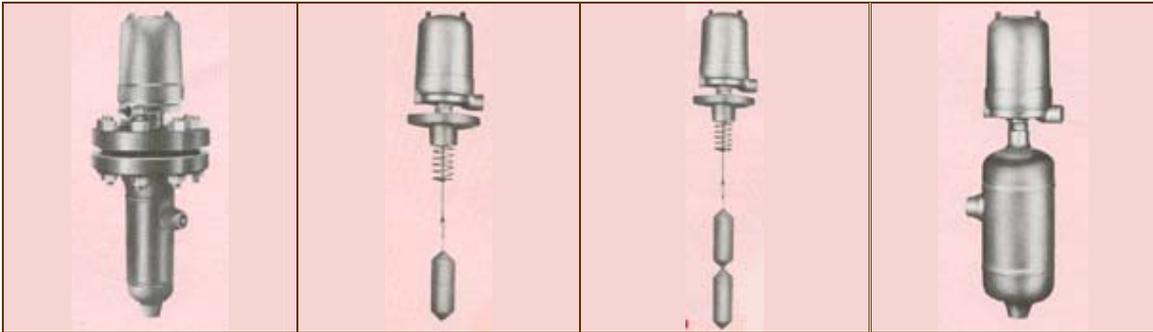


# DISPLACER OPERATED LEVEL SWITCHES



All controls have been designed using modular concept standard assemblies may be incorporated in a wide variety of arrangements to meet virtually any control application allowing maximum interchangeability of assemblies. DK's unique engineering & manufacturing capability handles special process requirements promptly with-out long delays at an economical cost.

## OPERATING PRINCIPLE:

These switches have a displacer heavier than the liquid, which is suspended by a spring. When the liquid contacts the displacer, a buoyancy force is produced, which causes the effective weight of the displacer to change, this causes the spring to retract slightly to a new equilibrium position. When the spring retracts the attraction sleeve moves upward into the field of external 'u' magnet (thus overcoming the force of the bias spring & actuating the switching element).

## SALIENT FEATURES:

- ❑ Wide differential.
- ❑ Low cost & easy maintenance.
- ❑ Unaffected by liquid agitation.
- ❑ External adjustment range.
- ❑ Choice of switches - Micro Switch / Mercury Switch / Reed Switch.

## APPLICATIONS:

For wide switching differentials & higher pressure ratings. Used where traditional float operated units cannot work.

## STANDARD SPECIFICATIONS:

<b>Model</b>	: <b>8500F</b>
Type	: Displacement Type Level Switch
Working Principle	: Attraction
Material of Construction for Displacer & Wetted Parts	: AISI 304 SS / AISI 304 SSL / AISI 316 SS / AISI 316 SSL / PVC / Polypropylene / Teflon / Ebonite etc.
Switch Cover	: Cast Aluminum, Weatherproof As per IP – 55 / 65 / 66 / 67 Anticorrosive Painted
Process Connection	: Flanged 2" to 6" As per ANSI, DIN, JIS, BS, IS Standard or 2" Screwed connection
Signalisation	: Micro Switch / Mercury Switch / Reed Switch.
Contact Form	: 1 NO + 1 NC, 2 NO + 2 NC
Contact Rating	: 5A, 230V AC. 5A, 110V AC, 0.25A, 220V DC. 1A, 110V DC, 10A, 240V DC.
Electrical Connection	: ¾" ET / ½" NPT / ¾" NPT / 1" NPT, etc.
On – Off Differential	: 25 ± 5 mm, 45 ± 5 mm, 60 ± 5 mm or Adjustable.
Repeatability	: ± 0.5 % FSR
Accuracy	: ± 0.5 % FSR
Set Point	: Adjustable
No. of Displacer	: Single, Double, Triple & Quadruple
Max. Signalisation Height	: 50 mtrs.
Max. Working Pressure	: 100 Kg / cm <sup>2</sup>
Max. Working Temperature	: 400°C
Specific Gravity	: 0.55 to 1.55

## FLAME PROOF TYPES (SPECIFICATIONS SAME AS ABOVE)

<b>Model</b>	: <b>1100F</b>
Switch Cover	: Cast Aluminum Alloy LM-6 Approved by ERTL (E) / CMRI, Dhanbad for Group IIA & IIB Gases As per IS: 2148 & Weatherproof to IP-66 as per IS: 13947.

<b>Model</b>	: <b>1400F</b>
Switch Cover	: Cast Aluminum Alloy LM-6 Approved by ERTL (E) for Group IIC Gases As per IS: 2148 & Weatherproof to IP-66 As per IS: 13947.

## OTHER SPECIAL FEATURES:

- External Chamber - CS, MSRL, SS, PVC, PPE, etc.
- Stilling Pipes – GI, CS, SS, HDPE, PVC, etc.
- Radiating Fins for High Temperature Application.
- Higher Differential
- IBR
- Special Models on Request.



## D. K. Instruments Pvt. Ltd.

An ISO 9001:2008 Certified Company

76/2, Selimpur Road, Dhakuria, Kolkata – 700 031.

Ph. No.: 91-33-2415 1310 / 2405 0944, Fax: 91-33-2415 2311.

E-mail: info@dkinstruments.com, Web Site: www.dkinstruments.com

Marketed By: