



PRODUCT DATA SHEET

Model 610/710

Top Mounted Level Control Switches
Graphite Displacers



Solid Graphite Displacers

Simple adjustment of displacers for various switching differentials

Ideal for highly corrosive applications

Standard Omnitrol quality components

CSA and UL Approved

The Omnitrol Model 610/710 Top Mounted Level Control Switches Graphite Displacers

The Omnitrol Model 610 single stage control and the 710 two stage control are top mounted level switches of the adjustable differential type and utilize graphite as standard displacer material. Graphite, which is an extruded material having no binders to fail, is virtually indestructible making it ideal for corrosive application controlling chemical and petroleum products in wide temperature and pressure ranges. Because they are of the solid displacer type they are unaffected by pressures, leakage, collapsing, or surface agitation, making them well suited for difficult applications such as surging or agitated liquids.

With a simple field adjustment, the displacer can be positioned to any desired elevation below the mounting connection to open and/or close an electric or pneumatic switch. The distance between the on/off or open/close is adjustable from a minimum of 2-1/2" (in a specific gravity of 1.0) to the maximum length of the cable,

which is 10 feet (standard). Controls may be supplied with cables up to 75 feet for 600 series controls and 40 feet for 700 series.

The pressure, temperature and specific gravity in which these controls may be applied is a function of the selected mounting connection and displacer assembly. A Model 610 or 710 may be used for pressures up to 1500 PSIG with standard construction and with standard displacer options may be used in specific gravities as low as 0.35 (600 series only). Use table 1 on reverse side to find the minimum switching differential for the desired specific gravity.

Typical Applications:

High Temperature Water or Oils

Petro-Chemical Processes

Pump Control (Adjustable differentials)

Alarm Annunciation



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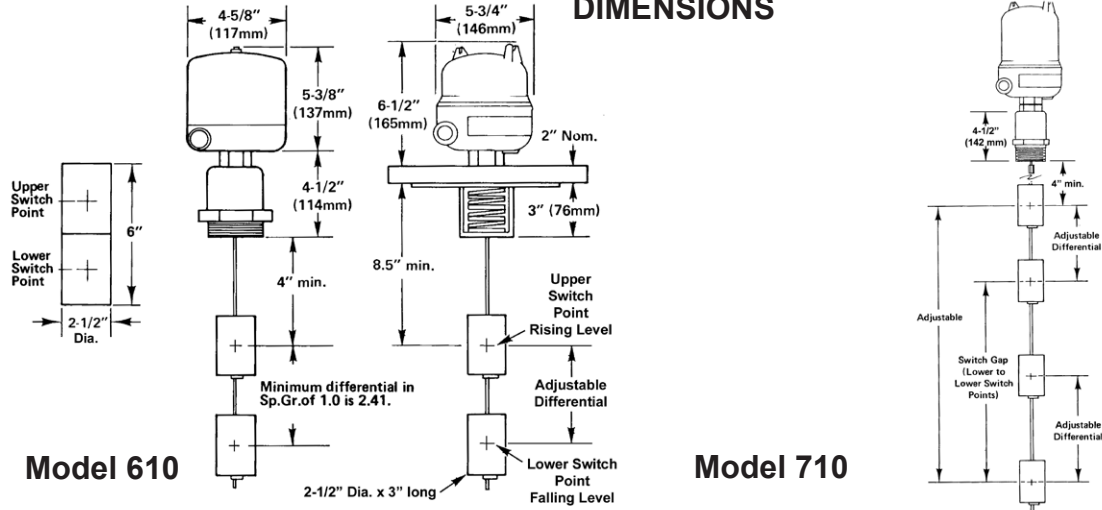
Specific Gravity	1.2	1.1	1.0	.95	.90	.85	.80	.75	.70	.65	.60	.55	.50	.45	.40
Differential Inches	2.1	2.2	2.4	2.5	2.7	2.8	2.9	3.1	3.3	3.5	3.8	4.2	4.5	5.0	5.6
Differential mm.	53	56	61	64	69	71	74	79	84	89	97	107	114	127	142

Table 1 Minimum switching differential for desired specific gravity (2-1/2" displacer)
 Basic Temperature Rating is -20° F to +400° F (-29° C to +204° C)

Stainless Steel Mounting with Mercury Switches	-50° F to 450° F (-46° C to 232° C)
Stainless Steel Mounting with Micro Switch	-100° F to 400° F (-73° C to 204° C)

Typical Temperature Variance (Process)
 For higher or lower temperatures, extensions may be provided (consult factory).

DIMENSIONS



All designs subject to change. Certified dimensions and specifications available upon request.

INFORMATION REQUIRED TO ORDER:

6(7)10- C - DEF - GH - I - JKL

Process Connection & Material

Flange Size _____

Flange Pressure Rating _____

Flange Face Type _____

Housing Type _____

Switch Type _____

Specific Gravity _____

Displacer Cable Length _____

Ground Level Checker _____

Specials _____