

# Dynatrol®

## Bulk Solids Level Detectors

Crafted in the USA for over 60 years, Dynatrol® Level Detectors are solidly constructed units designed to withstand harsh environments. Dynatrol® Level Detectors for bulk solids are designed for high, intermediate or low point level detection on materials ranging from light fluff to heavy granules and pellets. Dynatrol® Level Detectors are used for measurement and control on a variety of storage tanks, bins and silos. Applications for Dynatrol® bulk solids level detectors include:

- AGGREGATES
- CARBON BLACK
- CEMENT & SAND
- COAL HOPPERS
- FEED & GRAIN
- FLOCK & FLUFF
- FLY ASH COLLECTION
- FOODSTUFFS
- GRAIN STORAGE
- GRAVEL
- MINING
- PET FOOD
- PHARMACEUTICALS
- PLASTIC PELLETS
- POWDERS
- SUGAR & FLOUR
- WOOD SHAVINGS & DUST
- and more!



### ADVANTAGES

Dynatrol® Level Detectors can achieve reliable operation where other types of controls may experience operational failure. Dynatrol® level detection switches successfully operate with consistent results on many difficult product applications. All the level detector components are constructed for a long operating life and require no field adjustments. There are various models available to fit your level detection needs and we will work with you to find a fit for difficult level detection applications. Dynatrol® Level Detectors can be modified for special level detection applications such as cryogenic temperatures, temperatures greater than 600°F, sealed and suspended units, chemical corrosion and media requiring special coatings. Let Dynatrol® provide a worry-free solution for you today!

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# Dynatrol® Bulk Solids Level Detectors

## PRINCIPLE OF OPERATION

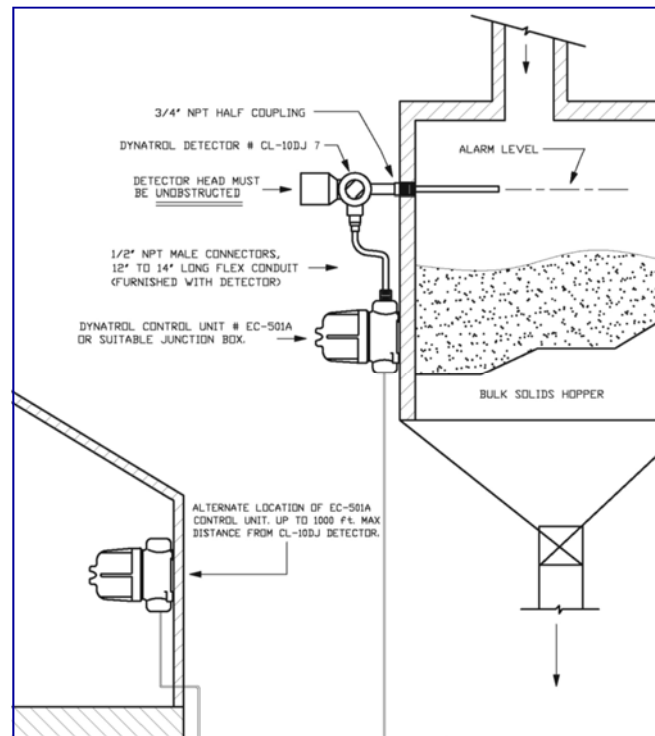
Dynatrol® Level Detector are installed at the desired point of level detection. An uncovered probe is free to vibrate and produces an output signal. The signal operates a relay indicating the probe is uncovered and a low level exists. When the probe is covered, a dampening of the oscillation occurs. The resultant loss of signal de-energizes the relay, indicating a high level exists.

The ON/OFF signal from the vibrating Dynatrol® Level Detector operates the EC-501A Control Unit's single-pole, double-throw (SPDT) relay. The contacts of this relay can be used to actuate level alarms, indicator lights or process control equipment.

## SPECIFICATIONS

### DYNATROL® Level Detectors for Bulk Solids

- Explosion Proof: CSA NRTL/C approved for Class I, Group C & D; Class II, Groups E, F & G; Class III
- Temperature Rating: 300°F  
(consult factory for higher ratings)
- Pressure Rating: 1000 PSIG @ 100°F  
(consult factory for higher ratings)
- Pressure Connection: 3/4-inch NPT
- Conduit Connection: 1/2-inch NPT



Unit ID	Probe Type	Probe Length	Control Unit	Typical Range	Max Temp	Level Detection	Materials
CL-10DJ	Rod	10"	EC-501A	15-60 lbs/ft <sup>3</sup>	300	high, int., low	low density flakes, powders, heavy granulars / pellets
CL-10DJ-7	Rod	7"	EC-501A	60+ lbs/ft <sup>3</sup>	300	high, int., low	heavy granulars / pellets
CL-10GJ	Paddle	4.25"	EC-501A(G)	10-15 lbs/ft <sup>3</sup>	300	high, int., low	light powders, flour, cocoa, sugar. Packs, bridges, ratholes
CL-10GS	Paddle	4.75"	EC-501A(G)	5-10 lbs/ft <sup>3</sup>	300	high, int., low	light weight free flowing media
CL-10GSS	Paddle	5.5"	EC-501A(G)	0.5-5 lbs/ft <sup>3</sup>	300	high, int., low	fine, low density powders and materials