Filters out small signal changes (e.g. sensor noise) around a defined CENTER. This is common in analog inputs that fluctuate around a steady value. Inputs

IN – Raw input signal.

DEADBAND - Allowed range of fluctuation (tolerance).

CENTER – Central reference point.

ENABLE – (Not present here, but should be added for consistency)

Outputs

 $\operatorname{OUT}$  – Filtered output.

IS\_ACTIVE – Indicates whether the input is outside the deadband (i.e., real movement).

Internal Variable

Deviation – Difference between input and center.