



| Tag ID of the event trigger | predefined | | | | | | |
|-----------------------------|-----------------------------------------------------------------------------------|-----------|---------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------|
| Algorithm type | | | | | | | |
| token type | $z < z^*$ | $z > z^*$ | $\theta > \theta^*$ | $d_{gap} > d_{gap}^*$ | $d_{gap} > d_{gap}^*$ | $z > z^*$ | $z > z^*$ |
| motion type | linear | | | compound linear | compound rotation | rotation | S.H.M. |
| time series signal type1 | sliding | | forward sliding | | counter-clockwise | spinning | swinging |
| time series signal type2 | hovering | | backward sliding | | clockwise | | |
| algorithm type & output | $V_L = L(z, \theta) / T_M$ speed of linear translation * from a lookup table | | | $V_L = (D_{tag} + d_{gap}) / t_i^1$ speed of linear translation $PO = [\bullet, \bullet]$ presence order : type of signal | | $f_R^n = \frac{1}{T_i^n}$ frequency of rotation $PO = [\bullet, \bullet, \bullet]$ presence order : type of signal | |
| additional input parameters | L_{on}^{M1} (z=sliding, $\theta=0$) L_{on}^{M2} (z=hovering, $\theta=0$) | | | $M = \{1, 2, 3\}$ major component M & segment count N : type of signal $N = \{1, 2, 3\}$ | | $f_R^n = \frac{1}{T_i^n}$ frequency of rotation $f_{SHM}^n = \frac{1}{2T_i^n}$ frequency of simple harmonic motion | |
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