# List of coefficients

## 1. Jdot matrix

| Name | Expression | Multiplies matrix term | Multiplies velocity variable | Index in matrix |
|---|---|---|---|---|
| $\sigma_9$ | $l_1$ | $c_{\alpha-\varphi_p}(\dot{\alpha} - \dot{\varphi}_p)$ | $\dot{\alpha}$ | 1,3 |
| | | $s_{\alpha-\varphi_p}(\dot{\alpha} - \dot{\varphi}_p)$ | $\dot{\alpha}$ | 2,3 |
| | $-l_1$ | $c_{\alpha-\varphi_p}(\dot{\alpha} - \dot{\varphi}_p)$ | $\dot{\varphi}_p$ | 1,6 |
| | | $s_{\alpha-\varphi_p}(\dot{\alpha} - \dot{\varphi}_p)$ | $\dot{\varphi}_p$ | 2,6 |
| $\sigma_{10}$ | $\dfrac{r}{2}$ | $s_{\alpha-\varphi_p}(\dot{\alpha} - \dot{\varphi}_p)$ | $\dot{\varphi}_r$ | 1,4 |
| | | | $\dot{\varphi}_l$ | 1,5 |
| | $-\dfrac{r}{2}$ | $c_{\alpha-\varphi_p}(\dot{\alpha} - \dot{\varphi}_p)$ | $\dot{\varphi}_r$ | 2,4 |
| | | | $\dot{\varphi}_l$ | 2,5 |