

SO(3) irrep	Symmetries	Expansion in fundamental field	Source
$\mathcal{B}_{0^+}^{\#1}$	StrongGenSet[{}], GenSet[]	$\mathcal{B}^{\alpha}_{\alpha} - \mathcal{B}^{\alpha\beta} n_{\alpha} n_{\beta}$	$\mathcal{T}_{0^+}^{\#1}$
$\mathcal{B}_{0^+}^{\#2}$	StrongGenSet[{}], GenSet[]	$\mathcal{B}^{\alpha\beta} n_{\alpha} n_{\beta}$	$\mathcal{T}_{0^+}^{\#2}$
$\mathcal{B}_{1^+_{\alpha\beta}}^{\#1}$	StrongGenSet[{1, 2}], GenSet[-(1,2)]	$\frac{\mathcal{B}_{\alpha\beta}}{2} - \frac{\mathcal{B}_{\beta\alpha}}{2} + \frac{1}{2} \mathcal{B}_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} \mathcal{B}_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} \mathcal{B}_{\alpha}^{\chi} n_{\beta} n_{\chi} + \frac{1}{2} \mathcal{B}_{\alpha}^{\chi} n_{\beta} n_{\chi}$	$\mathcal{T}_{1^+_{\alpha\beta}}^{\#1}$
$\mathcal{B}_{1^-_{\alpha}}^{\#1}$	StrongGenSet[{}], GenSet[]	$\mathcal{B}^{\beta}_{\alpha} n_{\beta} - \mathcal{B}^{\beta\chi} n_{\alpha} n_{\beta} n_{\chi}$	$\mathcal{T}_{1^-_{\alpha}}^{\#1}$
$\mathcal{B}_{1^-_{\alpha}}^{\#2}$	StrongGenSet[{}], GenSet[]	$\mathcal{B}_{\alpha}^{\beta} n_{\beta} - \mathcal{B}^{\beta\chi} n_{\alpha} n_{\beta} n_{\chi}$	$\mathcal{T}_{1^-_{\alpha}}^{\#2}$
$\mathcal{B}_{2^+_{\alpha\beta}}^{\#1}$	StrongGenSet[{1, 2}], GenSet[(1,2)]	$\frac{\mathcal{B}_{\alpha\beta}}{2} + \frac{\mathcal{B}_{\beta\alpha}}{2} - \frac{1}{3} \eta_{\alpha\beta} \mathcal{B}^{\chi}_{\chi} + \frac{1}{3} \mathcal{B}^{\chi}_{\chi} n_{\alpha} n_{\beta} - \frac{1}{2} \mathcal{B}_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} \mathcal{B}_{\beta}^{\chi} n_{\alpha} n_{\chi} - \frac{1}{2} \mathcal{B}_{\alpha}^{\chi} n_{\beta} n_{\chi} - \frac{1}{2} \mathcal{B}_{\alpha}^{\chi} n_{\beta} n_{\chi} + \frac{1}{3} \eta_{\alpha\beta} \mathcal{B}^{\chi\delta} n_{\chi} n_{\delta} + \frac{2}{3} \mathcal{B}^{\chi\delta} n_{\alpha} n_{\beta} n_{\chi} n_{\delta}$	$\mathcal{T}_{2^+_{\alpha\beta}}^{\#1}$