	$\sigma_{1^+}^{\#1}{}_{\alpha}$	$\sigma_{1^-}^{\#2}{}_{\alpha}$	$\tau_{1^-}^{\#1}{}_{\alpha}$	$\tau_{1^-}^{\#2}{}_{\alpha}$
$\sigma_{1^+}^{\#1}{}_{\alpha}\dagger$	0	0	0	0
$\sigma_{1^+}^{\#2}{}_{\alpha}\dagger$	0	0	0	0
$\tau_{1^+}^{\#1}{}_{\alpha}\dagger$	0	0	0	0
$\sigma_{1^-}^{\#1}{}_{\alpha}\dagger$	$\frac{2}{k^2 (r_3+2 r_5)}$	$\frac{2\sqrt{2}}{k^2 (1+2k^2)(r_3+2r_5)}$	0	$\frac{4i}{k(1+2k^2)(r_3+2r_5)}$
$\sigma_{1^-}^{\#2}{}_{\alpha}\dagger$	$\frac{2\sqrt{2}}{k^2 (1+2k^2)(r_3+2r_5)}$	$\frac{3k^2(r_3+2r_5)+4t_3}{(k+2k^3)^2(r_3+2r_5)t_3}$	$\frac{i\sqrt{2}\,(3k^2(r_3+2r_5)+4t_3)}{k(1+2k^2)^2(r_3+2r_5)t_3}$	0
$\tau_{1^-}^{\#1}{}_{\alpha}\dagger$	0	$\frac{i\sqrt{2}\,(3k^2(r_3+2r_5)+4t_3)}{k(1+2k^2)^2(r_3+2r_5)t_3}$	0	$\frac{6k^2(r_3+2r_5)+8t_3}{(1+2k^2)^2(r_3+2r_5)t_3}$
$\tau_{1^-}^{\#2}{}_{\alpha}\dagger$	0	0	$\frac{6k^2(r_3+2r_5)+8t_3}{(1+2k^2)^2(r_3+2r_5)t_3}$	$\frac{4i}{k(1+2k^2)(r_3+2r_5)}$
$\sigma_{1^+}^{\#1}{}_{\alpha\beta}\dagger$	0	0	0	0
$\sigma_{1^+}^{\#2}{}_{\alpha\beta}\dagger$	0	0	0	0
$\tau_{1^+}^{\#1}{}_{\alpha\beta}\dagger$	0	0	0	0
$\sigma_{1^-}^{\#1}{}_{\alpha}\dagger$	0	0	0	0
$\sigma_{1^-}^{\#2}{}_{\alpha}\dagger$	0	0	0	0
$\tau_{1^-}^{\#1}{}_{\alpha}\dagger$	0	0	0	0
$\tau_{1^-}^{\#2}{}_{\alpha}\dagger$	0	0	0	0

	$\sigma_{1^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{1^+}^{\#2}{}_{\alpha\beta}$	$\tau_{1^+}^{\#1}{}_{\alpha\beta}$
$\sigma_{1^+}^{\#1}{}_{\alpha\beta}\dagger$	$\frac{1}{k^2 (2 r_3+r_5)}$	0	0
$\sigma_{1^+}^{\#2}{}_{\alpha\beta}\dagger$	0	0	0
$\tau_{1^+}^{\#1}{}_{\alpha\beta}\dagger$	0	0	0
$\sigma_{1^-}^{\#1}{}_{\alpha}\dagger$	0	0	0
$\sigma_{1^-}^{\#2}{}_{\alpha}\dagger$	0	0	0
$\tau_{1^-}^{\#1}{}_{\alpha}\dagger$	0	0	0
$\tau_{1^-}^{\#2}{}_{\alpha}\dagger$	0	0	0

Lagrangian density

$$\frac{2}{3} t_3\, \omega_{\prime}^{\alpha\prime}\, \omega_{\kappa\alpha}^{\kappa} - \frac{1}{2} r_3\, \partial_{\prime}\omega^{\kappa\lambda}\, \partial^{\prime}\omega_{\kappa}^{\alpha}{}_{\lambda}^{\alpha} - r_5\, \partial_{\prime}\omega^{\kappa\lambda}\, \partial^{\prime}\omega_{\kappa}^{\alpha}{}_{\lambda}^{\alpha} + \frac{2}{3} r_2\, \partial^{\beta}\omega^{\theta\alpha}\, \partial_{\theta}\omega_{\kappa}^{\alpha}{}_{\alpha\beta}^{\kappa} - \frac{2}{3} r_2\, \partial_{\theta}\omega_{\alpha\beta}^{\kappa}\, \partial_{\kappa}\omega^{\alpha\beta\theta} + \frac{1}{2} r_3\, \partial_{\alpha}\omega_{\lambda}^{\alpha}{}_{\theta}^{\theta\kappa\lambda}\, \partial_{\kappa}\omega^{\theta\kappa\lambda} - \frac{1}{2} r_3\, \partial_{\theta}\omega_{\lambda}^{\alpha}{}_{\alpha}^{\kappa}\, \partial_{\kappa}\omega^{\theta\kappa\lambda} + r_5\, \partial_{\alpha}\omega_{\lambda}^{\alpha}{}_{\theta}^{\theta\kappa\lambda}\, \partial_{\kappa}\omega^{\theta\kappa\lambda} - r_5\, \partial_{\theta}\omega_{\lambda}^{\alpha}{}_{\alpha}^{\theta\kappa\lambda}\, \partial_{\kappa}\omega^{\theta\kappa\lambda} + r_3\, \partial_{\theta}\omega_{\lambda}^{\alpha}{}_{\alpha}^{\kappa\lambda\theta}\, \partial_{\kappa}\omega^{\kappa\lambda\theta} + 2 r_5\, \partial_{\theta}\omega_{\lambda}^{\alpha}{}_{\alpha}^{\kappa\lambda\theta}\, \partial_{\kappa}\omega^{\kappa\lambda\theta} - \frac{2}{3} t_3\, \omega_{\kappa\lambda}^{\lambda}\, \partial^{\kappa}f_{\prime}^{\prime} - \frac{4}{3} t_3\, \partial^{\alpha}f_{\kappa\alpha}^{\prime}\, \partial^{\kappa}f_{\prime}^{\prime} + \frac{2}{3} t_3\, \partial_{\kappa}f_{\lambda}^{\lambda}\, \partial^{\kappa}f_{\prime}^{\prime} + \frac{2}{3} t_3\, \omega_{\prime\alpha}^{\alpha}\, \partial^{\kappa}f_{\kappa}^{\prime} - \frac{2}{3} t_3\, \omega_{\prime\lambda}^{\lambda}\, \partial^{\kappa}f_{\kappa}^{\prime} + \frac{2}{3} t_3\, \partial^{\alpha}f_{\kappa}^{\prime}\, \partial^{\kappa}f_{\kappa\alpha}^{\prime} + \frac{1}{3} r_2\, \partial_{\kappa}\omega^{\alpha\beta\theta}\, \partial^{\kappa}\omega_{\alpha\beta\theta} + \frac{2}{3} r_2\, \partial_{\kappa}\omega^{\theta\alpha\beta}\, \partial^{\kappa}\omega_{\alpha\beta\theta} - \frac{2}{3} r_2\, \partial^{\beta}\omega_{\prime}^{\alpha\lambda}\, \partial_{\lambda}\omega_{\alpha\beta}^{\prime} + \frac{2}{3} r_2\, \partial^{\beta}\omega_{\prime}^{\lambda\alpha}\, \partial_{\lambda}\omega_{\alpha\beta}^{\prime} - 4 r_3\, \partial^{\beta}\omega_{\prime}^{\lambda\alpha}\, \partial_{\lambda}\omega_{\alpha\beta}^{\prime} - \frac{1}{2} r_3\, \partial_{\alpha}\omega_{\lambda}^{\alpha}{}_{\theta}^{\theta\kappa}\, \partial^{\lambda}\omega^{\theta\kappa} - \frac{1}{2} r_3\, \partial_{\theta}\omega_{\lambda}^{\alpha}{}_{\alpha}^{\theta\kappa}\, \partial^{\lambda}\omega^{\theta\kappa} - r_5\, \partial_{\alpha}\omega_{\lambda}^{\alpha}{}_{\theta}^{\theta\kappa}\, \partial^{\lambda}\omega^{\theta\kappa} - r_5\, \partial_{\theta}\omega_{\lambda}^{\alpha}{}_{\alpha}^{\theta\kappa}\, \partial^{\lambda}\omega^{\theta\kappa}$$

Added source term: $f^{\alpha\beta}\,\tau_{\alpha\beta} + \omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}$

	$\omega_{0^+}^{\#1}$	$f_{0^+}^{\#1}$	$f_{0^+}^{\#2}$	$\omega_{0^-}^{\#1}$
$\omega_{0^+}^{\#1}\dagger$	t_3	$-i\sqrt{2}\,k t_3$	0	0
$f_{0^+}^{\#1}\dagger$	$i\sqrt{2}\,k t_3$	$2k^2 t_3$	0	0
$f_{0^+}^{\#2}\dagger$	0	0	0	0
$\omega_{0^-}^{\#1}\dagger$	0	0	0	$k^2 r_2$

	$\omega_{2^+}^{\#1}{}_{\alpha\beta}$	$f_{2^+}^{\#1}{}_{\alpha\beta}$	$\omega_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\omega_{2^+}^{\#1}\dagger^{\alpha\beta}$	$-\frac{3k^2 r_3}{2}$	0	0
$f_{2^+}^{\#1}\dagger^{\alpha\beta}$	0	0	0
$\omega_{2^-}^{\#1}\dagger^{\alpha\beta\chi}$	0	0	0

	$\sigma_{0^+}^{\#1}$	$\tau_{0^+}^{\#1}$	$\tau_{0^+}^{\#2}$	$\sigma_{0^-}^{\#1}$
$\sigma_{0^+}^{\#1}\dagger$	$\frac{1}{(1+2k^2)^2 t_3}$	$-\frac{i\sqrt{2}\,k}{(1+2k^2)^2 t_3}$	0	0
$\tau_{0^+}^{\#1}\dagger$	$\frac{i\sqrt{2}\,k}{(1+2k^2)^2 t_3}$	$\frac{2k^2}{(1+2k^2)^2 t_3}$	0	0
$\tau_{0^+}^{\#2}\dagger$	0	0	0	0
$\sigma_{0^-}^{\#1}\dagger$	0	0	0	$\frac{1}{k^2 r_2}$

	$\sigma_{2^+}^{\#1}{}_{\alpha\beta}$	$\tau_{2^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2^+}^{\#1}\dagger^{\alpha\beta}$	$-\frac{2}{3k^2 r_3}$	0	0
$\tau_{2^+}^{\#1}\dagger^{\alpha\beta}$	0	0	0
$\sigma_{2^-}^{\#1}\dagger^{\alpha\beta\chi}$	0	0	0

Source constraints

	#
SO(3) irreps	1
$\tau_{0^+}^{\#2} == 0$	1
$\tau_{0^+}^{\#1} - 2i k\,\sigma_{0^+}^{\#1} == 0$	3
$\tau_{1^-}^{\#2\alpha} + 2i k\,\sigma_{1^-}^{\#2\alpha} == 0$	3
$\tau_{1^-}^{\#1\alpha} == 0$	3
$\tau_{1^+}^{\#1\alpha\beta} == 0$	3
$\sigma_{1^+}^{\#2\alpha\beta} == 0$	5
$\sigma_{2^-}^{\#1\alpha\beta\chi} == 0$	5
$\tau_{2^+}^{\#1\alpha\beta} == 0$	5
Total #:	24

	$\omega_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^+}^{\#2}{}_{\alpha\beta}$	$f_{1^+}^{\#1}{}_{\alpha\beta}$	$\omega_{1^-}^{\#1}{}_{\alpha}$	$\omega_{1^-}^{\#2}{}_{\alpha}$	$f_{1^-}^{\#1}{}_{\alpha}$	$f_{1^-}^{\#2}{}_{\alpha}$
$\omega_{1^+}^{\#1}\dagger^{\alpha\beta}$	$k^2(2r_3+r_5)$	0	0	0	0	0	0
$\omega_{1^+}^{\#2}\dagger^{\alpha\beta}$	0	0	0	0	0	0	0
$f_{1^+}^{\#1}\dagger^{\alpha\beta}$	0	0	0	0	0	0	0
$\omega_{1^-}^{\#1}\dagger^{\alpha}$	0	0	0	$k^2(\frac{r_3}{2}+r_5)+\frac{2t_3}{3}$	$-\frac{\sqrt{2}\,t_3}{3}$	0	$-\frac{2}{3}i k t_3$
$\omega_{1^-}^{\#2}\dagger^{\alpha}$	0	0	0	$-\frac{\sqrt{2}\,t_3}{3}$	$\frac{t_3}{3}$	0	$\frac{1}{3}i\sqrt{2}\,k t_3$
$f_{1^-}^{\#1}\dagger^{\alpha}$	0	0	0	0	0	0	0
$f_{1^-}^{\#2}\dagger^{\alpha}$	0	0	0	$\frac{2ik t_3}{3}$	$-\frac{1}{3}i\sqrt{2}\,k t_3$	0	$\frac{2k^2 t_3}{3}$

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Quadratic pole

Pole residue:	$-\frac{1}{r_3(2r_3+r_5)(r_3+2r_5)p^2} > 0$
Polarisations:	2

(No massive particles)

Unitarity conditions

$$r_3 < 0 \,\&\&\, (r_5 < -\tfrac{r_3}{2} \,||\, r_5 > -2 r_3) \,\|\, r_3 > 0 \,\&\&\, -2 r_3 < r_5 < -\tfrac{r_3}{2}$$