$$
\begin{array}{c|ccc|}
 & \mathcal{A}^{\#1}_{0^+} & \phi^{\#1}_{0^+} & \mathcal{B}^{\#1}_{0^+} \\
\hline
\mathcal{A}^{\#1}_{0^+}{}^\dagger & k^2\,\alpha & -\frac{1}{2}\,i\,k\,\epsilon & 0 \\
\phi^{\#1}_{0^+}{}^\dagger & \frac{i\,k\,\epsilon}{2} & k^2\,\delta+\eta & 0 \\
\mathcal{B}^{\#1}_{0^+}{}^\dagger & 0 & 0 & \Upsilon_1\,k^2+\zeta \\
\hline
\end{array}
\qquad
\begin{array}{c|cc|}
 & \mathcal{A}^{\#1}_{1^-}{}_\alpha & \mathcal{B}^{\#1}_{1^-}{}_\alpha \\
\hline
\mathcal{A}^{\#1}_{1^-}{}^\dagger{}^\alpha & 0 & 0 \\
\mathcal{B}^{\#1}_{1^-}{}^\dagger{}^\alpha & 0 & \zeta+k^2\,\gamma \\
\hline
\end{array}
$$

$$
\begin{array}{c|ccc|}
 & \mathcal{J}^{\#1}_{0^+} & \rho^{\#1}_{0^+} & \mathcal{K}^{\#1}_{0^+} \\
\hline
\mathcal{J}^{\#1}_{0^+}{}^\dagger & \frac{\Upsilon_1\,k^4\,\delta+\zeta\,\eta+k^2\,(\zeta\,\delta+\Upsilon_1\,\eta)}{\mathrm{Det}\,(0^+)} & \frac{i\,\Upsilon_1\,k^3\,\epsilon+i\,k\,\zeta\,\epsilon}{2\,\mathrm{Det}\,(0^+)} & 0 \\
\rho^{\#1}_{0^+}{}^\dagger & \frac{-i\,\Upsilon_1\,k^3\,\epsilon-i\,k\,\zeta\,\epsilon}{2\,\mathrm{Det}\,(0^+)} & \frac{\Upsilon_1\,k^4\,\alpha+k^2\,\alpha\,\zeta}{\mathrm{Det}\,(0^+)} & 0 \\
\mathcal{K}^{\#1}_{0^+}{}^\dagger & 0 & 0 & \frac{4\,k^4\,\alpha\,\delta+k^2\,(-\epsilon^2+4\,\alpha\,\eta)}{4\,\mathrm{Det}\,(0^+)} \\
\hline
\end{array}
\qquad
\begin{array}{c|cc|}
 & \mathcal{J}^{\#1}_{1^-}{}_\alpha & \mathcal{K}^{\#1}_{1^-}{}_\alpha \\
\hline
\mathcal{J}^{\#1}_{1^-}{}^\dagger{}^\alpha & 0 & 0 \\
\mathcal{K}^{\#1}_{1^-}{}^\dagger{}^\alpha & 0 & \frac{1}{\zeta+k^2\,\gamma} \\
\hline
\end{array}
$$

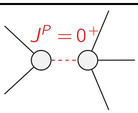
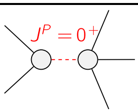
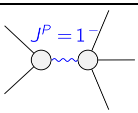
Abbreviations used in matrices

$\Upsilon_1 == \beta+\gamma \;\&\&\; \mathrm{Det}\,(0^+) == \frac{1}{4}\,k^2\,(-\epsilon^2+4\,\alpha\,(k^2\,\delta+\eta))\,(\zeta+k^2\,(\beta+\gamma))$

Lagrangian

$\eta\,\phi^2+\zeta\,\mathcal{B}_\alpha\,\mathcal{B}^\alpha+\epsilon\,\phi\,\partial_\alpha\mathcal{A}^\alpha+\delta\,\partial_\alpha\phi\,\partial^\alpha\phi+\gamma\,\partial_\alpha\mathcal{B}^\beta\,\partial^\alpha\mathcal{B}_\beta+\alpha\,\partial_\alpha\mathcal{A}^\alpha\,\partial_\beta\mathcal{A}^\beta+\beta\,\partial_\alpha\mathcal{B}^\alpha\,\partial_\beta\mathcal{B}^\beta$

Added source term(s):	$\phi\,\rho+\mathcal{A}^\alpha\,\mathcal{J}_\alpha+\mathcal{B}^\alpha\,\mathcal{K}_\alpha$	
Source constraint(s)	# constraint(s)	Covariant form
$\mathcal{J}^{\#1\alpha}_{1^-} == 0$	3	$\partial_\beta\partial^\alpha\mathcal{J}^\beta == \partial_\beta\partial^\beta\mathcal{J}^\alpha$
Total # constraint(s):	3	

Resolved pole(s)	# polarization(s)	Square mass	Residue
	1	$\frac{\epsilon^2-4\,\alpha\,\eta}{4\,\alpha\,\delta}$	$\frac{\alpha\,\epsilon^2+\delta\,\epsilon^2-4\,\alpha^2\,\eta}{\alpha\,\delta\,\epsilon^2-4\,\alpha^2\,\delta\,\eta}$
	1	$-\frac{\zeta}{\beta+\gamma}$	$\frac{1}{\beta+\gamma}$
	3	$-\frac{\zeta}{\gamma}$	$-\frac{1}{\gamma}$

Resolved unitarity condition(s):	(Demonstrably impossible)