

K $\in \mathbb{R}^{n \times n}$, **B** $\in \mathbb{R}^{m \times n}$, $\alpha_1, \dots, \alpha_m, \beta_1, \dots, \beta_n \in \mathbb{C}$,
 $\gamma_1, \dots, \gamma_m, \delta_1, \dots, \delta_n \in \mathbb{R}$

I $\in \mathbb{R}^{n \times n}$

$$\begin{aligned} & \frac{1}{2} \left(\|\mathbf{B}^T(\mathbf{A}^T\mathbf{K}\mathbf{A} + \mathbf{I})\mathbf{B} - \mathbf{B}^T(\mathbf{A}^T\mathbf{K}\mathbf{A} + \mathbf{I})\mathbf{B}^T \right)^2 \\ & + \sum_{i=1}^m \left| \frac{\alpha_i}{\gamma_i} \right|^2 + \sum_{j=1}^n \left| \frac{\beta_j}{\delta_j} \right|^2 + \frac{1}{2} \left(\|\mathbf{B}^T(\mathbf{A}^T\mathbf{K}\mathbf{A} + \mathbf{I})\mathbf{B} - \mathbf{B}^T(\mathbf{A}^T\mathbf{K}\mathbf{A} + \mathbf{I})\mathbf{B}^T \right)^2 \\ & + \sum_{i=1}^m \left| \frac{\alpha_i}{\gamma_i} \right|^2 + \sum_{j=1}^n \left| \frac{\beta_j}{\delta_j} \right|^2 \end{aligned}$$

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