

Transfer Line Insulation

Attachment 42 Attached Sheet 9 Section 2-5

- (6) Insulating materials shall be wound around the exhaust gas inlet pipe (including the flexible pipe).

The insulating materials shall have a thickness of 25 mm or more and a thermal conductivity not exceeding $0.1 \text{ W/(m}\cdot\text{K)}$ ($\text{W/(m}\cdot\text{°C)}$) at 673 K (400°C).

Global technical regulation No. 4 Annex 3

A.3.2.5. Components of figure 15

EP Exhaust pipe

The exhaust pipe length from the exit of the engine exhaust manifold, turbocharger outlet or after-treatment device to the dilution tunnel shall be not more than 10 m. If the system exceeds 4 m in length, then all tubing in excess of 4 m shall be insulated, except for an in-line smoke meter, if used. The radial thickness of the insulation shall be at least 25 mm. The thermal conductivity of the insulating material shall have a value no greater than 0.1 W/mK measured at 673 K. To reduce the thermal inertia of the exhaust pipe a thickness-to-diameter ratio of 0.015 or less is recommended. The use of flexible sections shall be limited to a length-to-diameter ratio of 12 or less.

Insulation requirement of JPN reg. for PM is from WHDC (GTR.4).
No technical supporting data we have...