

Specifications

품 명	영문 : Procurement of Elastomeric Lead-lag Dampers of Small Scale Rotor Hub for Rotor Wind Tunnel Test									
모 델 명	Elastomeric lead-lag damper									
세부 사양	<p>(1) Configuration</p> <ul style="list-style-type: none"> - Damper length between two rod end bearings is 85mm. - The diameter or width of damper is less than 35mm. <div style="text-align: center; margin: 10px 0;"> </div> <p>(2) Damper loads</p> <ul style="list-style-type: none"> - Damper should withstand the maximum tension load of 600N and the maximum compression load of 900N. <p>(3) Stiffness and damping</p> <ul style="list-style-type: none"> - Elastomeric dampers have the characteristics of elastic and damping and complex stiffness is expressed as follows $K^* = K' + j \times K''$ <ul style="list-style-type: none"> - Target stiffness and damping values of a damper <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Frequency</th> <th>K' (N/mm)</th> <th>K''(N/mm)</th> </tr> </thead> <tbody> <tr> <td>14.4 Hz(0.5/rev)</td> <td>239</td> <td>67</td> </tr> <tr> <td>28.7 Hz(1/rev)</td> <td>327</td> <td>100</td> </tr> </tbody> </table> <ul style="list-style-type: none"> - Primary operating frequency for damper design is 1/rev and damper should be designed to match the target values of stiffness and damping at 1/rev requirements within 20% tolerance. <p>(4) Test</p> <ul style="list-style-type: none"> - Acceptance test reports for dampers should be provided. 	Frequency	K' (N/mm)	K''(N/mm)	14.4 Hz(0.5/rev)	239	67	28.7 Hz(1/rev)	327	100
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