WHO WE ARE

Astotec Automotive specializes in the development and production of advanced pyrotechnic solutions for systems that protect pedestrians and occupants, as well as for non-automotive applications. Our highly innovative developments deliver technological and competitive advantages whenever they are applied.

FULL CAPABILITIES IN HOUSE

Advanced equipment to evaluate all product parameters. Immediate analysis and actionable results within the hour. Changes can be made at very short notice. Field decision-making for product optimization. Current source for testing of electric components is a capacitor bank generating 30,000 A at 1000V DC. Complete in-house environmental testing available.

OUR CUSTOMERS

With our outstanding research and development track record and our long manufacturing experience, Astotec Automotive is the ideal partner at every stage of the development process, from initial concepts to pre-production to volume manufacturing. Our extensive manufacturing resources provide great cost efficiencies while ensuring that our products meet very rigorous quality demands.

Pedestrian Protection
PUSHING ACTUATORS
FOR ACTIVE HINGES & LATCHES

The actuator can fulfill the following functions, based on your requirements and specifications:

• Fixation starting position
• Fixation end position
• NVH conformity
• Defined retention force over time
• Resetting after reaching end position
• Resetting with defined force
• Damping head impact
• Oscillation damping

Active hood systems provide clearance between hood and engine in the event of a pedestrian collision by lifting the hood. The generated clearance grants that the head does not hit rigid components.

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Pushing piston</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuator type</td>
<td>Pushing piston</td>
</tr>
<tr>
<td>Activation time</td>
<td>2 - 40 ms</td>
</tr>
<tr>
<td>Piston stroke</td>
<td>5 - 130 mm</td>
</tr>
<tr>
<td>F max</td>
<td>7 500 N</td>
</tr>
<tr>
<td>Fixation forces</td>
<td></td>
</tr>
<tr>
<td>start position</td>
<td>1 000 N</td>
</tr>
<tr>
<td>end position</td>
<td>5 000 N</td>
</tr>
<tr>
<td>Design</td>
<td>Linear</td>
</tr>
<tr>
<td>Interfaces</td>
<td>Leadwire/Pintype</td>
</tr>
<tr>
<td>Noise exposure</td>
<td>&lt; 95 dB</td>
</tr>
<tr>
<td>BAM approval</td>
<td>CE-Conformity acc. EU/Pyr/technical directive 2007/23/EG</td>
</tr>
<tr>
<td>Specification</td>
<td>According customers demand</td>
</tr>
</tbody>
</table>

BENEFITS

• Extreme fast reaction times
• Stable and reliable performance over lifetime
• Compact and robust design
• No flaming and no hot gases
• Various integration options possible
• Cost efficient & lightweight

PEDESTRIAN PROTECTION
ADVANCED PYROTECHNIC SOLUTIONS

Active hood systems provide clearance between hood and engine in the event of a pedestrian collision by lifting the hood. The generated clearance grants that the head does not hit rigid components.

The actuators can reset the hood directly or can be integrated within the hinges or latches. Our customers benefit from our experience as market leader for pyrotechnic actuators. This leads to reduced development time, efforts and costs.

BENEFITS

• Prototyping fast & precise, time & cost saving
• Extreme fast modifications possible
• Testing in system environment
• Immediate analysis after testing
• Development & support from concept to series production

Astotec Automotive
DEVELOPMENT CENTER