

application profile: safety belt retractor



In the automotive industry, you need PA66 products that perform to a higher standard. Vydyne® resins and compounds help you get the most out of every part you produce. For under-the-hood applications, Vydyne products deliver superior chemical and heat resistance. For exterior and interior components, Vydyne offers versatile, reliable and customizable resins. Our quality and consistency make the difference in your production efficiency.

Product Used: R228

Benefits: High Strength • Low Warpage • Superior Mold Flow • Wear Resistance • Lubricity

Application Description

Pictured below are safety belt retractors used in a number of North American vehicles. The safety belt retractors are molded then supplied to a global safety systems manufacturer.

The Challenge

Safety belt retractors are a critical component in the safety belt system. In normal use, this part supports the safety belt reel utilizing Vydyne's inherent lubricity and wear resistance. The high strength of the Vydyne R228 locks the reel and distributes the load to the rest of the retractor.



The Vydyne Difference

Ascend's Vydyne R228 is ideal for this application because of its high strength and wear properties. The superior mold flow allows the fine details of the part to be molded without internal stress that affects the part's performance. Low warpage ensures the part is dimensionally correct to allow it to function properly.

The Ascend Automotive team utilizes mold flow analysis, finite element analysis and years of safety system experience to create optimal parts for Ford,® General Motors,® Chrysler® and Hyundai.®

For more information, see your Ascend representative or visit www.ascendmaterials.com.

R228			
Property	Method	Units	DAM
Density	ISO 1183	g/cm³	1.48
Tensile Stress	ISO 527-2	MPa	103
Flexural Modulus	ISO 178	MPa	6,100
Notched Izod	ISO 180	kJ/m²	9
DTUL @ 1.8 MPa	ISO 75-2/A	°C	118

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