

## SOURIAU in Motorsport

*The launch of the new 8STA shell size 2, the world's smallest circular connector for Motorsport is the result of SOURIAU's 20 years of experience and involvement in this area.*

SOURIAU is a world leader in connectors for harsh environments. Its involvement in Motorsport began 20 years ago with the use of Mil C 26482 connectors from Dassault F1 mirage air fighters to equip Renault F1 cars. In 1990, connectors from Souriau then equipped Peugeot 905 for the Le Mans 24 hours race. The company is currently producing the smallest on-board connector and sells tens of thousands of connectors each year. Souriau has equipped championship teams in F1 and World Rally for a number of years.



Size comparison of connectors developed in the past (left), and present (right)

Historically, harsh environment compliance (vibration, shock, extreme temperature, sealing, resistance to fluid etc.) was the first hurdle to overcome in equipping the Motorsport market. Strong aeronautic experience was a key requirement for connector suppliers to enter the market. Now, with the increasing need for on-board electronics, even if harsh environment remains a characteristic, reducing the size and the weight of connectors whilst maintaining or improving the performance level, has become the main goal.

Connectors are necessary for all vehicle sub-systems, engine, suspension, wheels, brakes, instrument panel, fuel tank ..., be it for sensors, electronics controllers to optimise fuel consumption or engine speed or simple junction boxes, they all need to be light and compact to fit into tight spaces.

On average, a race car has approximately 120 connectors; using compact connectors can lead to a 500g to 1kg saving in weight. This is important because it gives car designers an opportunity to improve the handling performance of the car through more effective weight distribution.

The final result of years of SOURIAU's miniaturization efforts is the 8STA shell size 2, the smallest Motorsport connector available today. Specifically developed to respond to Motorsport needs, it is now applied in such aerospace applications as unmanned air vehicles or military applications such as land troopers and even tanks. Aeronautic experience has allowed the development of Motorsport-specific innovative products, and now aeronautics will benefit from R&D investment in Motorsport as well.

8STA shell size 2 is part of the 8STA harsh environment compact connectors range of Souriau. It includes a full product range for Motorsport applications, 6 way connectors designed for dual output sensors, power connectors rated at 200 Amps, fuel tank connectors with high corrosion resistance and various shell and contact sizes.

Throughout the years, Souriau has built a specific worldwide Motorsport distributor network that gives immediate access to stock of all common connector sizes and configurations. Motorsport also benefits from the significant investment that Souriau has made in its production facilities, ensuring the delivery of consistently high quality product.

Souriau's commitment to product innovation and customer service makes it the ultimate source for connectors designed for harsh environments, and the natural choice for motor racing teams and system manufacturers.