

## Press release

### Setting new standards in engine development

Kistler's new high-precision cylinder pressure sensor can be mounted in any position

Winterthur, November 2018

**Kistler's new M8 cylinder pressure sensor (Type 6044A) features an anti-strain design that makes it ideal for direct mounting in high-performance engines – with excellent thermodynamic precision, temperature stability and very low linearity deviation. A versatile, reliable sensor that delivers high-quality results – the optimum solution for the complete engine development cycle.**

Modern combustion engines deliver higher performance despite increasingly compact dimensions, setting new challenges for cylinder pressure measurement: users demand higher accuracy and greater stability under difficult conditions, but less and less space is available to accommodate the measurement technology. The new uncooled 6044A cylinder pressure sensor is Kistler's response to both of these challenges: significantly improved performance on one hand and a design that reduces sensitivity to external disturbance on the other.

#### Versatile range of applications

David Mauke, Product Manager Sensors, Engine R&D, explains: "The measuring element in our new sensor is decoupled from the sensor body – a design feature that ensures excellent stability under high loads, making this sensor highly rugged and insensitive to its mounting position. This is a versatile solution for engine development applications, from concept validation through to final calibration." Thanks to its lifetime-optimized piezo crystal, the 6044A also withstands high pressure peaks coming from pre-ignition.

#### Rugged and consistent – also when mounted directly

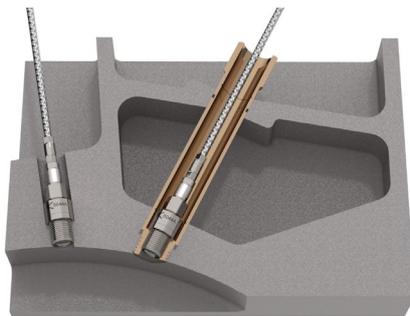
Kistler's latest innovation is fully compatible for installation with uncooled Type 6045 cylinder pressure sensors, as well as water-cooled Type 6041 sensors with an M8x0.75 through-hole thread. Key benefits include minimal sensitivity shift across the temperature range (thermal sensitivity shift), very low linearity deviation and high thermal shock resistance.

With an extended pressure range of up to 300 bar, the 6044A is the ideal replacement for earlier sensor versions. David Mauke's final comment: "Kistler's new cylinder pressure sensor gives engine developers more accurate measurement values combined with minimal cycle-to-cycle deviations especially when it is mounted directly."

**Image material** (please name the Kistler group as picture source)



Kistler's new 6044A cylinder pressure sensor is largely insensitive to its mounting position, and it delivers unbeatable measurement results..



Rugged and consistent, even when mounted directly in confined spaces: the new 6044A by Kistler.

#### **Media contact**

Denis Marschel  
Divisional Marketing Manager ART  
Tel.: +41 52 2241 859  
Email: [denis.marschel@kistler.com](mailto:denis.marschel@kistler.com)

#### **About the Kistler Group**

Kistler is the global leader in dynamic measurement technology for measuring pressure, force, torque and acceleration. Cutting-edge technologies provide the basis for Kistler's modular solutions.

Customers in industry and science benefit from Kistler's experience as a development partner, enabling them to optimize their products and processes so as to secure a sustainable competitive edge. The owner-managed Swiss company's unique sensor technology plays a key role in the evolution of automobile development and industrial automation, as well as in numerous emerging sectors. With a broad knowledge of applications and its absolute commitment to quality, Kistler is making an important contribution to the further development of current megatrends. This includes topics such as electrified drive technology, autonomous driving, emission reduction and Industry 4.0.

Some 2 000 employees at 61 locations worldwide are dedicated to developing new solutions and offer customized service for individual applications. Since its founding in 1959, the Kistler Group has grown along with its customers, generating sales of CHF 422 million in 2017. Approximately 8% of this went back into research and technology — and thus into achieving better results for all our customers.