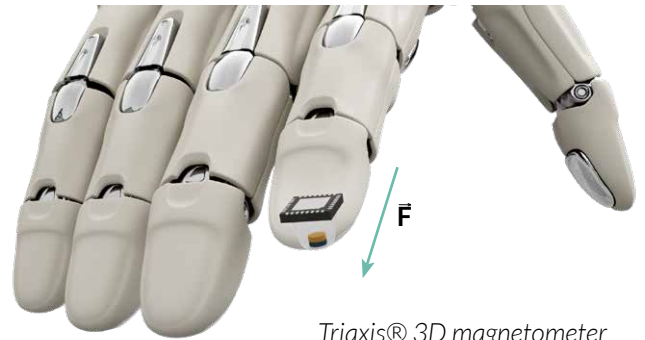
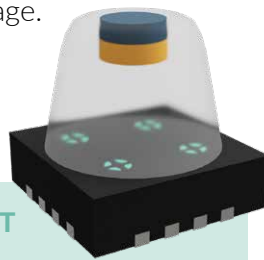


## TACTAXIS™

Give robots a sense of touch

Melexis brings a tactile sensor designed for industrial robots and humanoids that need the sense of touch. It's compact (6 mm x 6 mm x 5 mm), soft and provides the 3D force vector acting on the surface. Our force sensor is fully integrated and will be mass manufactured using semiconductor technology. While robust against stray field and temperature changes, it offers cost and reliability advantage.



*Triaxis® 3D magnetometer and a magnet embedded in an elastomer*

### INNOVATE WITH HEART

Give robots a sense of touch

- Get close to the human sense of touch on robots
- Help robots to handle fragile objects, manipulate unpredictable shapes and allow slip detection
- Increase the safety level of collaborative robots with force feedback

### APPLICATIONS

Where a sense of touch is needed

- Grippers
- Autonomous mobile robots
- Exoskeleton

### SECRET INGREDIENTS

- Technology: magnetic position sensor (Melexis core expertise)
- Process: industrial-grade manufacturing of the elastomer (with or without embedded magnet)
- Patents: stray field rejection, slip detection algorithm, sensor integration



### Abbreviations definition

- Taxel "Tactile Pixel"
- Triaxis Enable magnetic 3D field measurement ([www.melexis.com/triaxis](http://www.melexis.com/triaxis))

### References

- Press release: [www.melexis.com/pr-tactaxis](http://www.melexis.com/pr-tactaxis)
- Video: [www.melexis.com/robotics](http://www.melexis.com/robotics)
- White paper: available on [www.mdpi.com](http://www.mdpi.com)



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