



# Force and pressure measurement

Collision measurement for collaborative robots

CONSULTING AND DESIGN

**SICK**  
Sensor Intelligence.



### Product description

In human-robot interactions with collaborative robots (cobots), the force, speed, pressure and motion path of the robot must be limited to reduce the risk of robot applications.

Integrators of cobots must comply with the limit values for force and pressure in accordance with ISO/TS 15066 or RIA TR R15.606. During machine design, it is therefore necessary to validate and document that the force and pressure of a possible collision of a robot with a person would not exceed the recommended limit values.

SICK offers a service for measuring the force and pressure at the hazardous point defined in the risk assessment. In doing so, compliance with the safety parameters for force and pressure set in the robot control is examined and verified.

### At a glance

- Efficient measurement of force and pressure by certified safety specialists from SICK
- Documentation in compliance with ISO/TS 15066 including an overview of upheld and exceeded limit values
- Expert knowledge in Safe Robotics: SICK provides support in interpreting measurement results

### Your benefits

- Force and pressure measurement by SICK provides valuable data to reduce the risk of your robot application
- Defined processes and a structured process for quick and reliable measurement give you more time to concentrate on your core business
- You get a complete and easily understandable measurement report for your technical machine documentation
- Profit from the decades of experience of SICK in machine safety and get a protection solution which ensures high productivity

### Ordering information

Additional services → [www.sick.com/Force\\_and\\_pressure\\_measurement](http://www.sick.com/Force_and_pressure_measurement)

Product area	Machine life cycle	Documentation	Type	Part no.
Industrial Safety	Commissioning	A report with all results of the measurements. This contains references and limit values for the different body regions (ISO/TS 15066) and can be used as part of the robot system documentation.	Force and pressure measurement	1615692

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)