

AIRSKIN® SAFETYFLANGE

ROBOTIC COLLISION SENSOR

AIRSKIN® Safetyflange is a compliant robotic collision sensor with PLe/Cat3 ISO 13849 safety certification.

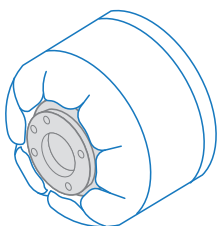
Based on the proven AIRSKIN® pressure-sensitive skin technology, the AIRSKIN® Safetyflange detects tool and workpiece collisions in multiple directions and sends a safe stop signal to the robot controller.

The break-away movement in angular, axial and torsional directions absorbs energy and reduces pressure and force during collisions in collaborative applications.

The spring-loaded device automatically resets itself after a collision, with high repeatability.



ANY ROBOT



ANY EoAT



ADVANTAGE

The AIRSKIN® Safetyflange prevents damage to expensive robotic end-effectors such as cameras, grippers, etc.

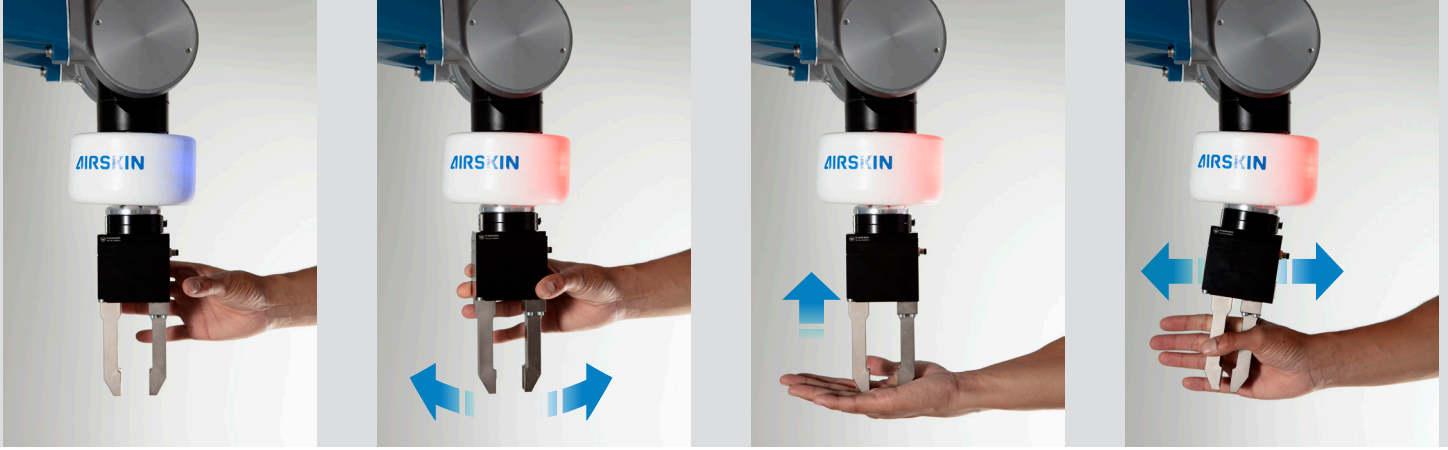
BENEFITS

- SPACE** Enables fence-free applications by protecting the tool and the workpiece
- SPEED** Shorter cycle times in collaborative applications due to faster vertical and horizontal robot movements
- SAFETY** „Finger-safe“ applications - eliminates crushing and clamping risks

USE CASES

- PALLETIZING
- VISUAL INSPECTION
- PICK AND PLACE
- GLUING





EASE OF USE

- Fits any robot by replacing ISO adaptors
- Adapts to your application by changing internal springs
- Easy to mount on robot
- Add-on solution for cobots and industrial robots
- Fast installation: 6 wires - directly connects to robot's safety IOs
- Easier and **faster risk assessment**

DISPLACEMENT

- 11 mm in Z-direction
- +/- 10° torsional/twist motion
- +/- 8,8° angular/tilt motion

REPEATABILITY AFTER BREAK-AWAY

- Z-displacement: +/- 0,004 mm
- Twist motion: +/- 0,03°
- Tilt motion: +/- 0,05°

FEATURES

- Maximum load: 20 kg
- Weight: 650 g
- Size: 127 x 85 mm
- Reaction time: max. 9 ms
- Electrical connection: 24V, OSSD, 6 wires
- Springs:
 - Red - hard
 - Green - medium
 - Blue - soft



AIRSKIN® Safetyflange, 3 interchangeable springs, 3 flange adaptors, cable AIRSKIN® connection module needed to operate the AIRSKIN® Safetyflange

AVAILABLE FLANGE ADAPTORS:

- ISO 9409-1-50-4-M6
- ISO 9409-1-31,5-7-M5
- ISO 9409-1-40-4-M6

CERTIFICATION

- Complies with ISO 13849 PLe and IEC 62061 (SIL3)
- Certified by TÜV Austria
- Enables ISO/TS 15066 collaborative applications

