Double your payload capacity with...

RAD’s U-4622-SA ULTIMATIC™ Collision Sensor with Spring-Assist!

The Spring-Assist Model of RAD’s U-4622 pneumatic collision sensor has the ability to handle nearly double the payload with the same footprint as the standard model 4622!

RAD’s Ultimatic™ Collision Sensors provide crash protection and increased safety by mechanically detecting when the robot arm* has encountered an obstruction, absorbing the crash energy and quickly signaling the robot to stop – thus preventing costly damage to equipment and tooling.

Operating Principle:
The Spring-Assist Ultimatic™ works by establishing the minimal points of contact required to restrain all degrees of freedom (movement) in normal operation. When a collision occurs and external forces upset this balance, the collision sensor provides angular, rotational and compressive compliance. This event opens a normally closed switch sending a signal to your system’s E-stop or controller.

Features:
- Sends a signal to the system’s E-stop or controller within 4 to 10 ms of a collision
- Absorbs the crash energy without releasing compressed air into the environment
- Resets automatically to within ±0.0005” (0.013mm) in X, Y, & Z dimensions and to within ±0.017 degrees rotationally
- Senses a collision even when the robot arm is not in motion
- Increases payload capacity to nearly double that of RAD’s standard 4622 with no increase in size
- Maintains some resistance even with no air pressure, reducing tooling sag if air pressure is lost
- Provides angular, rotational and axial (compressive) compliance
- Allows for dynamically variable resistance through regulation of air pressure
- Offers adjustable switch sensitivity

Options:
- Adapter Plate(s) to mount the collision sensor to your system or tooling
- Debris Shield to protect the collision sensor in dirty environments
- High-Flex Cable

*can also be used on linear actuators, pick & place machines, and other automated equipment
Count on RAD for...

Performance: Products with superior functionality, reliability, and durability.
Reassurance: Standard 12-month warranty on all products – 36 months for tool changers.
Assistance: Technically qualified customer service reps simplify sizing and ordering.
Convenience: Quick turnaround and shipment – 1 to 5 days for standard orders.

Since our invention of the very first collision sensor in 1984, RAD has delighted our customers with quality end-of-arm tooling products. As an engineering-centric firm RAD designs, manufactures, and markets a variety of robotic and hard-tooled accessories including:

- collision sensors
- compliance (alignment) devices
- deburring tools
- grippers
- tool changers

Quality Standards

Registered to: