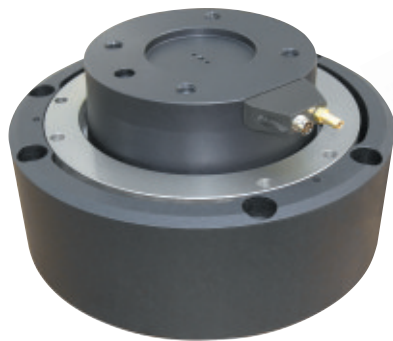


# Double your payload capacity with...



Model U-4622-SA

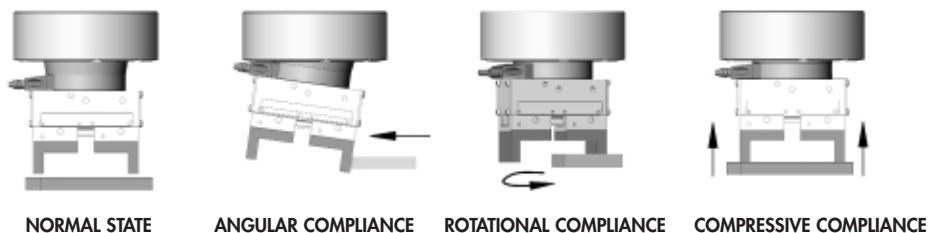
## *New!* RAD's U-4622-SA ULTIMATIC™ Collision Sensor with Spring-Assist!

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.



NORMAL STATE

ANGULAR COMPLIANCE

ROTATIONAL COMPLIANCE

COMPRESSIVE COMPLIANCE

### 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  $\pm 0.0005''$  (0.013mm) in X, Y, & Z dimensions and to within  $\pm 0.017$  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:*

- ISO-9001:2000 Quality Management System Standard
- ISO-14001:2004 Environmental Management System Standard

# RAD

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