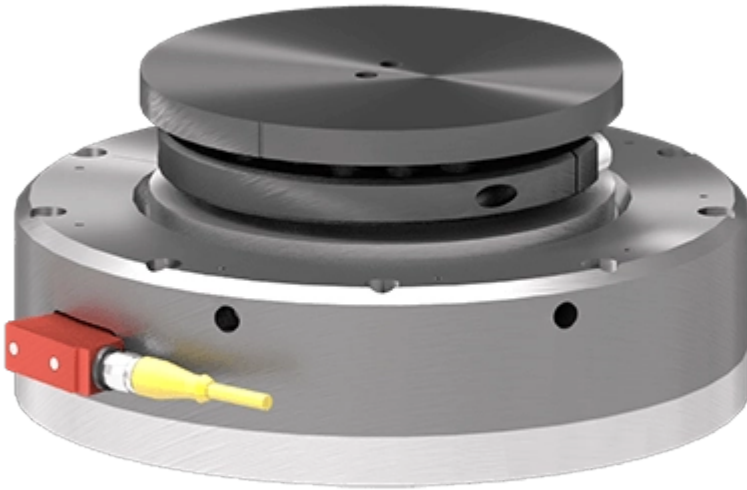# Collision Sensor | heavy payload | QS-4500

With moments trip point from 150 to 2300 Nm, heavy payload collision sensors will be the most appropriate models for your applications such as handling of larger and heavier items.

**Feature**

| | QS-4500 |
|---|---|
| **Repeatability - X, Y** | 0.038 mm |
| **Repeatability - Z** | 0.013 mm |

| | |
|---|---|
| **Rotational Repeatability** | ± 0.029 ° |
| **Axial Compliance Vertical** | 10.680 mm |
| **Compliance Angle** | 4 ° |
| **Rotary Compliance** | 25° |
| **Torque Trip Point** | 345 - 1185 Nm |
| **Moment Trip Point** | 220 - 614 Nm |
| **Weight** | 12.800 kg |
| **Diameter** | 260.000 mm |
| **Profile** | 115.000 mm |
| **Center of Mass** | 66.000 mm |
| **Average response time** | 4-18 ms |
| **Dust Protection** | Foam collar supplied |
| **Switch** | High reliability aircraft snap acting type. UL/CSA approved. Average cycle life : 7 million cycles |

# Detector QS-4500: Advanced technology for maximum protection



 **Operating conditions**

| | |
|---|---|
| **Operating Pressure** | 1.0 - 6.0 bar |
| **Operating Temperature** | Min. 0°C / Max. 100°C |

**Notice :** The provided technical data are the higher limits recommended in static condition. To obtain the correct dimensioning of the product, it is necessary to hold account of all the applicable dynamic forces, including the inertia of the manipulator, the configuration of the tools and the external forces applied.

- Dynamically variable collision sensor that operate on air pressure. Breakaway threshold adjusts to match the working force ranges of robot/application
- Non compressive, metal to metal seal for reliable and consistent operation
- Opening of QuickSTOP air chamber at impact, pressure exhaust and switch signal stop the robot

 **Advantages**

 **Benefits**

- Senses angular and compressive forces. QuickSTOP's unique design offers protection in X, Y and Z axis
- Linear and angle strokes available to remove the forces from end of arm tooling and robot wrist at trip point
- Performance readiness is monitored by QuickSTOP. When pressurized, the switch indicates that the QuickSTOP is reset in proper position

- Minimize down time, quick reset, no need for recalibration, stopping robot at source of impact allows for easy identification of cause
- Minimize robot and expensive end of arm tooling damage during robot programing. A must for any education or robot training cell
- Easy to implement, simple to adjust pressure level according application, quick return on investment

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