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.



QS-4500

Repeatability - X, 0.038 mm

Repeatability - Z 0.013 mm

QS-4500

Rotational ± 0.029 °

Axial Compliance

Vertical

10.680 mm

Compliance Angle $\,4^{\circ}$

Rotary

25°

Compliance

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





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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