Collision Sensor | small payload | QS-100



With moments trip point from 0.3 to 30 Nm. small payload collision sensors will be the most appropriate models for your applications such as pick and place or dispensing.



QS-100

Repeatability - X, 0.025 mm

Repeatability - Z 0.013 mm

Rotational ± 0.024 °

Axial Compliance

Vertical

4.500 mm

Compliance Angle $\,5^{\circ}$

Rotary

Compliance

No limit

Torque Trip Point 5.3 - 30.4 Nm **Moment Trip Point** 4.1 - 20.3 Nm

Weight 0.450 kg
Diameter 83.000 mm
Profile 37.000 mm
Center of Mass 21.600 mm

Average response

time

4-7 ms

Dust Protection Foam collar supplied

Switch High reliability aircraft snap acting type. UL/CSA

approved. Average cycle life: 7 million cycles

Collision detector QS-100: The ideal robustness for your complex operations



Operating conditions

Operating Pressure 1.0 - 6.0 bar

Operating Temperature Min. 0°C / Max. 70°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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