

variables/V-color

Collision Sensor | small payload | QS-50



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.



Feature

QS-50

**Repeatability - X,
Y** 0.025 mm

Repeatability - Z 0.013 mm

QS-50

Rotational Repeatability	$\pm 0.024^{\circ}$
Axial Compliance Vertical	4.300 mm
Compliance Angle	5°
Rotary Compliance	No limit
Torque Trip Point	2.2 - 14.0 Nm
Moment Trip Point	2.6 - 11.8 Nm
Weight	0.290 kg
Diameter	71.000 mm
Profile	35.000 mm
Center of Mass	20.300 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-50: A robust solution for your sensitive machinery



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 operates 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

- 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



Benefits

- 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 programming. 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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