Test report

TM-021 COLLISION SENSING

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| test report # | TR-021-2016-12-13-AURIS7DOF.DOCX | | |
| Author: Longfei Zhao | | Report revision: 01 | Date: 2016-12-13 |

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| Test description | |
| **Purpose**:  This test verifies that collision sensing warning messages will be printed, and the content of message indicates the collision type (Quasi-static or transient). | |
| **Test method**:  TM-021\_COLLISION SENSING | |
| **Acceptance criteria**:  If collision happened on the end effector, collision should be detected by joint torque indicator and wrench indicator. If collision happened on the robot link, collision should be detected by joint torque indicator, null space indicator and wrench indicator. Consistent applied collision force and a quick tap should give warning of quasi-static collision and transient collision, respectively. | |
| **Environmental conditions**:  Standard conditions for temperature and pressure | |
| **Equipment, software, tools and other material used**  Equipment:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Equipment ID #** | **Description** | **Manufacturer** | **Model** | **SN#** | |  |  |  |  |  | |  |  |  |  |  |   Software:   |  |  |  | | --- | --- | --- | | **Software ID #** | **Description** | **Revision** | |  |  |  | |  |  |  |   Other: | |
| **Item(s) under testing**: *(module, product / software / prototype)*   |  |  |  | | --- | --- | --- | | **Part number** | **Description** | **Revision** | |  |  |  | |  |  |  | | |
| **Tested by**: Name | **Test date**: Select date |

# Test results

## Section A – Collision with test bench

1. Drive robot moving in -X direction until it collide with Bar A.
2. Drive robot moving in +Y direction until it collide with Bar B.

## Collision with human

1. Gradually applying force to the end effector
2. Gradually applying force to link 4
3. Rapidly tap on the end effector.
4. Rapidly tap on the link 4.

# Conclusion

*{Provide a conclusion in this section. Indicate if all acceptance criteria are met or exceeded. Include recommendations as required.}*

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| **Report approved by** | **Signature** | **date** |
| Name:  Function: |  |  |

# Form revision log

| **Rev.** | **DCO #** | **Description of revision** | **Author** |
| --- | --- | --- | --- |
| 01 | DCO\_2016-001 | Initial draft | Jean-Yves Pairet |