Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No.	**20 505 - 11 HH**
Company	**Pepperl + Fuchs GmbH** **Lilienthalstr. 200** **68307 Mannheim, GERMANY**
Product Description	**Inclination and Acceleration Sensors**
Type	**IN** **AC**
Environmental Category	**D, F, EMC1**
Technical Data / Range of Application	**AC: nominal voltage 24 VDC, current output 4...20mA** **IN: nominal voltage 24 VDC, current output 4...20mA, voltage output 0...5V, 0,5...4,5V, 0...10V** **Type key inclination and acceleration sensors** **IN x x - F99 - xx - xx - x** **AC x x - F99 - xx - xx - x** **[1+2] [3] [4] [5] [6] [7] [8]** **[1+2] IN = Inclination Sensor** **AC = Acceleration Sensor** **[3] X = 1 axis, Y = 2 axis** **Environmental Category "H":** **Vibration test according to curve 2: 5 ... 150Hz**
Test Standard	**Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003**
Documents	**Test reports Pepperl+Fuchs: PRDE-AGG6 (18.10.2011), PRDE-AJA0B (25.01.2013), PRDE-A4G1 (27.04.2010), PRDE-AHU3 (16.03.2012);** **Data sheets sensors, sensor documents, materials, acc. To CD GL-Certification 10/2013, Data sheets cable: 31-0981C, 31-0982C;** **Test Report Firmware PRDE7412Q (02.01.14) and PRDE-A9COC (24.05.13)**
Remarks	**The operating voltage of the sensors must be well protected against surge caused by lightning, for example by operating at SELV/PELV power supplies.**

Valid until **2019-05-21**

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Hamburg, 2014-05-22

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Further Technical Data / Range of Application

[4] Measurement angle range
xxxD = Angle range for inclination sensor (xxx range 001...360)
xxx = Acceleration range (xxx range 01...200)
[5] F99 = Mechanical housing
[6] Electrical output (Combinations possible)
E2 = 3-wire DC, PNP, N.O.
I = Analog current output
U = Analog voltage output
[7] System connector 1
V1 = M12x1 device connector (4 pins)
V15 = M12x1 device connector (5 pins)
V17 = M12x1 device connector (8 pins)
...M = Cable length in meter (standard 5m)
[8] Customer specific settings of measurement range
Yxxxxxx = marking for customer specific version (xxxxxx = 6 digits of part number within typecode)

Measures for limitation of the propagation of fire along cable bundles are required (fire stops).
Halogen free properties of the cable are not tested.

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