



EU Declaration of Conformity

Application of Council Directive(s):

- Electromagnetic Compatibility Directive (EMCD) - 2014/30/EU
- Low Voltage Directive (LVD) - 2014/35/EU
- European Pressure Equipment Directive (PED) - 2014/68/EU
- Machinery Directive - 2006/42/EC
- Restriction of Hazardous Substances Directive (RoHS) – 2011/65/EU ⁽⁷⁾

Standard(s) to which conformity is declared:

- EN 61326-1:2013 - (EMC)
- EN 61326-2-3:2013 - (EMC)
- EN 61010-1:2010 + AMD 1:2016 (Ed 3) – (Safety)
- EN 60825-1:2014 Safety of Laser products - Part 1: Equipment classification and requirements
- PED Module SEP (Sound Engineering Practices): 2014

Manufacturers Name: MKS Instruments, Inc. Andover, MA, USA

Importer's Name & Location: /

Equipment Type/Description: **Compact Picomotor Piezo Actuator, Closed Loop, 12.7 mm Travel**

Model Number(s) ⁽⁶⁾: **8311**

MKS confirms that, with respect to the products listed above, it believes it is in conformity with the **selected** European Union harmonization legislation – noted on the attached page of this document. MKS product conforms to the above Directive(s) and Standard(s) only when installed in accordance with manufacturer's specifications. This declaration has been issued under the sole responsibility of the manufacturer.

Date: 07/24/2020

A handwritten signature in black ink, appearing to read 'Le Cointe Hervé', written over a circular stamp or seal.

Le Cointe Hervé

Quality Director



Test Specification Listing

Emissions:

- CISPR 11:2015 Industrial, Scientific and Medical Equipment Radio-Frequency Disturbance Characteristics - Limits and Methods of Measurement
- IEC 61000-3-2:2018 EMC/Limits for Harmonic Current Emission ⁽¹⁾
- IEC 61000-3-3:2013 + AMD1:2017 EMC/Limitations of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems ⁽²⁾
- IEC 61000-3-3:2013 + AMD1:2017 EMC/Limitations of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems ⁽³⁾
- EN 55011: 2016 +A1:2017 ⁽⁴⁾ Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement
- EN 55032:2015 Electromagnetic compatibility of multimedia equipment - Emission Requirements
- IEC 61000-6-4 (2018) Emission standard for industrial environments
- FCC 47 CFR Part 18: 2018
- FCC Part 15 class A

Immunity:

- IEC 61000-4-2:2008 EMC/Electrostatic Discharge Immunity Test
- IEC 61000-4-3:2006 2006+AMD1:2007+AMD2:2010 EMC/Radiated Radio - Frequency Electromagnetic Field Immunity Test
- IEC 61000-4-4:2012 EMC/Electrical Fast Transient/Burst Immunity Test
- IEC 61000-4-5:2014 + AMD 1:2017 EMC/Surge Immunity Test ⁽³⁾
- IEC 61000-4-6:2013 EMC/Conducted Disturbances induced by Radio Frequency Fields Immunity Test
- IEC 61000-4-8:2009 EMC/Power Frequency Magnetic Field Immunity Test
- IEC 61000-4-11:2004 + AMD 1:2017 EMC/Voltage Dips, Short Interruptions and Variations Immunity Test ⁽⁵⁾
- IEC 61000-4-34:2005+AMD1:2009 EMC/Voltage Dips, Short Interruptions and Variations Immunity Test ⁽⁵⁾
- IEC 61000-6-2 (2016) Immunity standard for industrial environments

Machinery EN Standard(s):

- EN ISO 12100:2010 Safety of Machinery – General Principles of Design – Risk Assessment and Risk Reduction
- EN 60204-1:2006 Safety of Machinery – Electrical Equipment of Machines - Part1: General Requirements
- EN 60204-33:2010 Safety of Machinery – Electrical Equipment of Machines – Part 33: Requirements for Semiconductor Fabrication Machinery
- EN ISO 13849-1:2008 Safety of Machinery – Safety Related Parts of Control Systems – Part 1: General Principles for Design
- EN ISO 11553-1:2008 Safety of Machinery- Laser Processing Machinery – Part 1: General Safety Requirements

Safety:

- IEC 60825-1:2014 Safety of Laser Products - Part 1: Equipment classification and requirements
- IEC 62471: 2006 Photobiological Safety of Lamps and Lamp Systems

-
- 1) Applicable to AC powered product only. Class B
 - 2) Applicable to AC powered product; DC powered connections must not connect to a D.C. distribution network; I/O Signal and Control Lines must be less than 30m and not exit the building.
 - 3) Applicable to AC powered product; DC powered connections and may connect to a D.C. distribution network.
 - 4) Class A, Group 2
 - 5) Applicable to AC powered product only.
 - 6) Compliance of the above model numbers requires the use of a braided shielded cable properly terminated at both ends – if so noted in the MKS Instruction Manual.
 - 7) RoHS Directive has to be checked for in scope products; cannot CE mark without compliance to RoHS. RoHS Directive can be unchecked only for systems which MKS sells which qualify for "Large Scale Industrial Tool" exclusion.