

Kohzu stages customization for *ESRF* (Date: 21. December 2021)

This customisation is standardized and agreed on with some customers of the facility and usually with the controls group. Please check each modification and let us know if you think something should be different.

It includes following modifications:

1. Motor

The standard motor (5 phase) on Kohzu stages will be exchanged to a 2 phase motor (Vexta Orientalmotors). For some stage-sizes high-resolution types (400 steps instead of 200 steps per revolution) are available.

2. Shielding

The leads from the motor to the connectors are shielded.



3. Stage connector

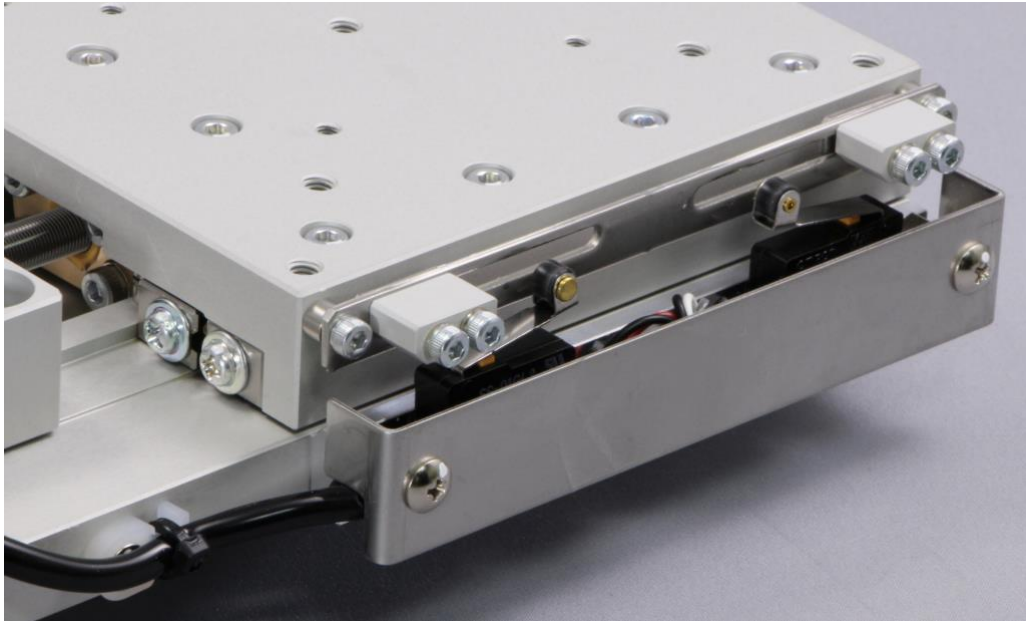
The connection on the stage is a *TNM0S14-0012P1L* (ITT Cannon)



4. Limit-Switches

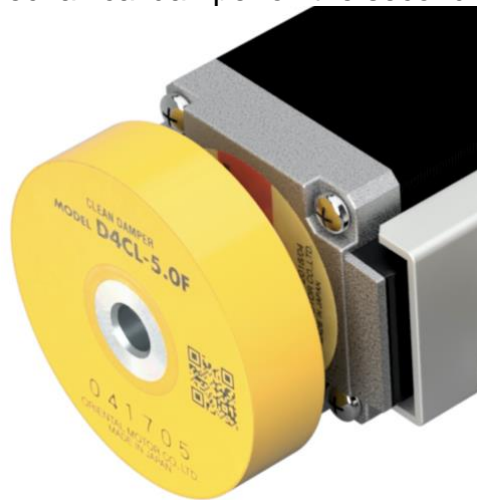
The standard limit-switches (optical: normally closed, "OK-output") on Kohzu stages will be exchanged to *mechanical limit-switches (normally closed)*.

Available signals: clockwise (CW-LS), counter-clockwise (CCW-LS), no home-signal.



5. Damper

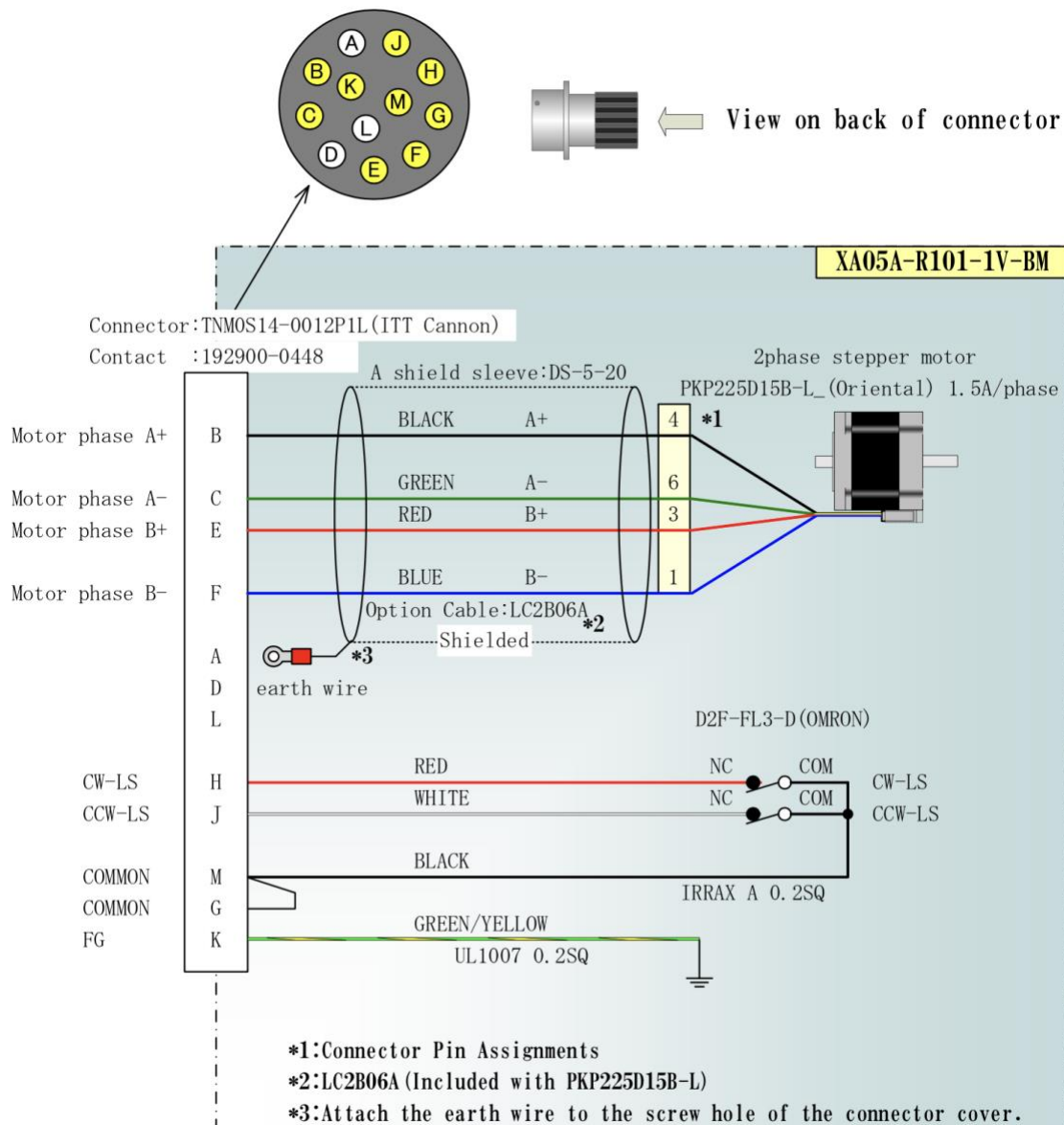
Motor is equipped with a mechanical damper on the second shaft of the motor axis.



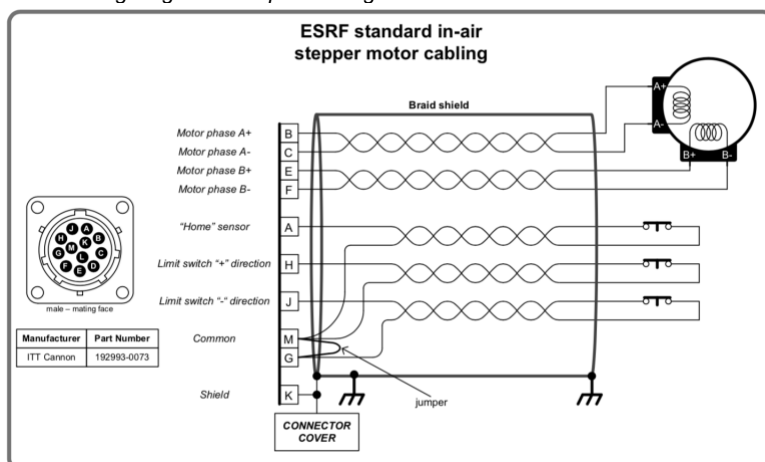
- NEMA 08: **no** damper
- NEMA 11 and bigger: **with** damper

Cabling

The standard cabling will be changed to be customer specific.



Kohzu wiring diagram of a specific stage

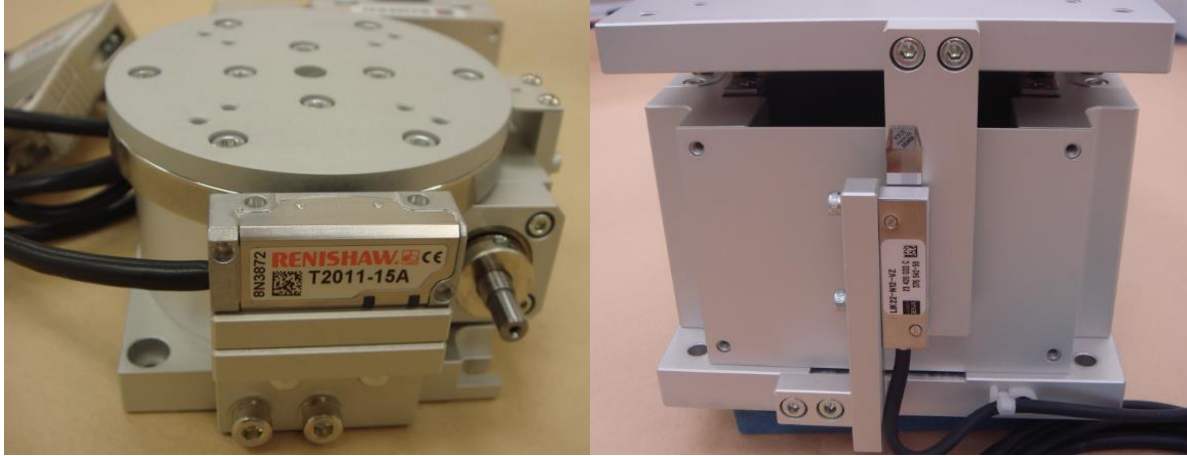


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Encoders

Kohzu provides absolute encoders (Renishaw) and incremental encoders (Renishaw/Jena) for air and vacuum applications as option on all stages.

Incremental Encoder



Absolute Encoder (Renishaw Resolute)

