



Kohzu stages customization for XFEL (Date: 30. July 2018)

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 exchange 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 LEMO FWG.3B.308







4. Limit-Switches

The standard limit-switches (optical: normally closed, "OK-output") on Kohzu stages will be exchanged to *mechanical limit-switches (normally closed) switching the 24V supply to the output.*

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

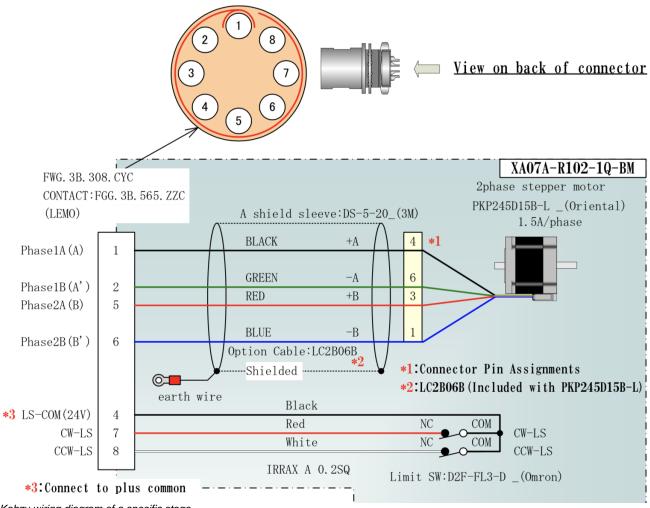






Cabling

The standard cabling will be changed to be customer specific.



Kohzu wiring diagram of a specific stage

Typical Name: C-2 Article No.: FWG.3B.308.CYC

Pin	Signal
1	Phase 1 A (A)
2	Phase 1 B (A')
3	GND
4	Ub+ (24V)
5	Phase 2 A (B)
6	Phase 2 B (B')
7	Limit CW
8	Limit CCW







copy from document: Standard Pinout for Connectors at XFEL Version 3.7 Sept. 2016

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)

