



LXYM 15 XY STAGE



SMAC has recently introduced a 2 axis XY moving coil stage of open frame construction. This actuator is intended for use in applications where it is necessary to move a sample over an optical inspection device and view through the sample.

Utilising standard, proven SMAC components the XY stage provides accurate positioning capability at superior speed to alternative motorised devices. Positioning across the entire range of movement (15mm) is achievable in less than 100ms. Precision guiding systems, strategically positioned relative to the stage insert, ensure flatness across the system.

Standard and custom mounting features and inserts can be configured to suit the user's application.



Preliminary Specification for Actuator LXYM15-015-55

Electrical Specification

Operating Voltage: 24V / 48V DC
 Maximum Current: 4 Amps
 Main Connector: High density 26 way D-Type

X Axis

Linear Stroke: 15mm
 Force Constant: 1.3kg/Amp
 Peak Force: 1.5Kgf (24V). 2.5 Kgf (48V)
 Coil DC Resistance: 24.5 Ohm @ 22 degree C
 Encoder Resolution: 5, 1, 0.5 micron
 Moving Mass: 360 grams

Y Axis

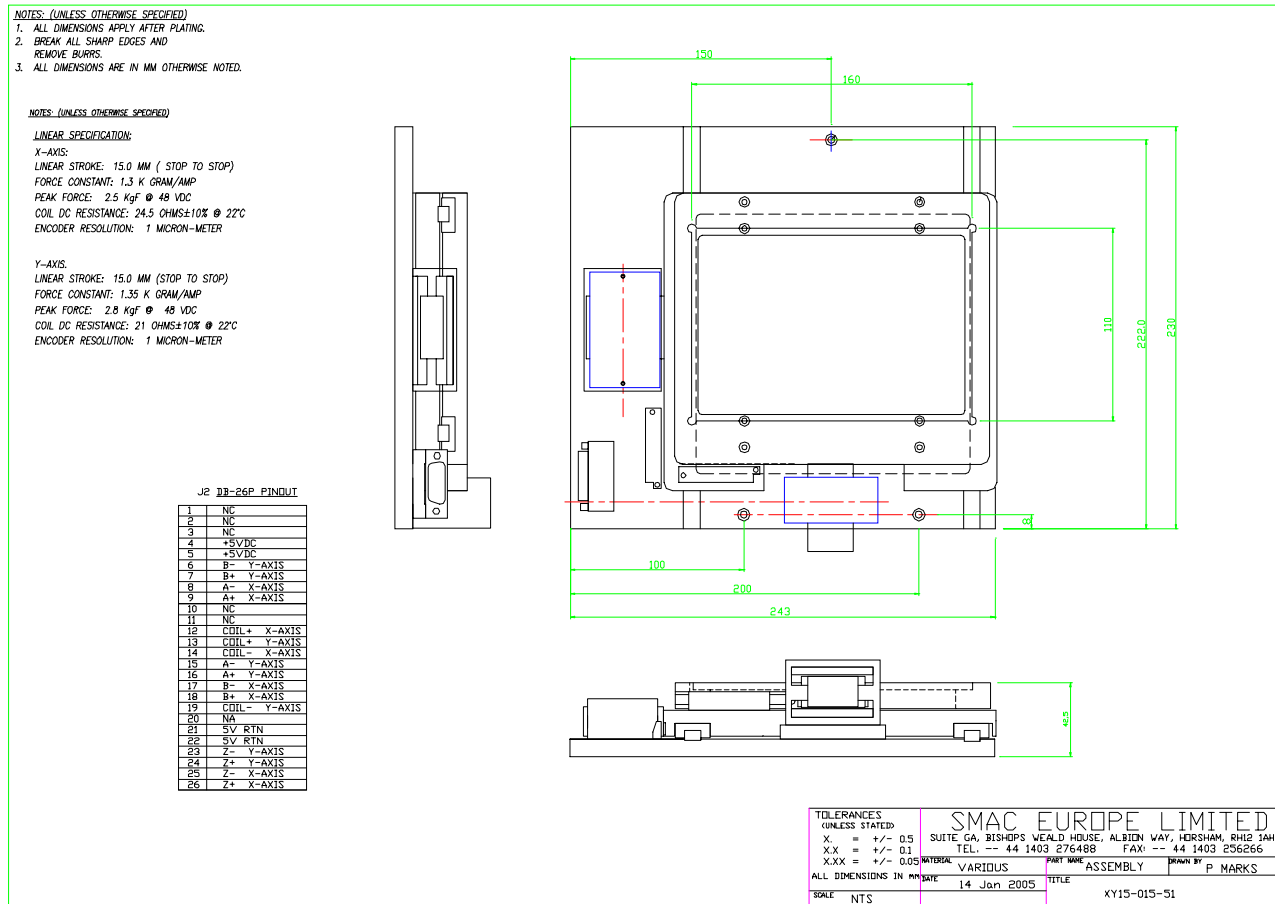
Linear Stroke: 15mm
 Force Constant: 1.35kg/Amp
 Peak Force: 1.68Kgf (24V). 2.8 Kgf (48V)
 Coil DC Resistance: 21 Ohm @ 22 degree C
 Encoder Resolution: 5, 1, 0.5 micron
 Moving Mass: 510 grams (plus axis 1)

Mechanical Specification:

Dimensions: 230 x 242.5 x 55mm
 Flatness: 15 microns over 160mm (measured at 4 point plide plate location)
 Repeatability: ± 1 encoder count
 Linear Guides: IKO LWL9 C2 R175 BHS2
 Payload: Zeiss Universal Mounting Frame K451352-00000-000
 Max Payload: 200 grams

System Specification:

Controller: SMAC LAC-25 2 axis servo controller
 Connector Cable: SMAC LAH-GRP-03



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