

## Compact Linear Drives with Stepper motor

**612-CLD25-SM-C16**

**612-CLD25-SM-LS-C16**

**612-CLD25-SM-LSPL-C16**

available with travel **25 / 50 / 100mm**

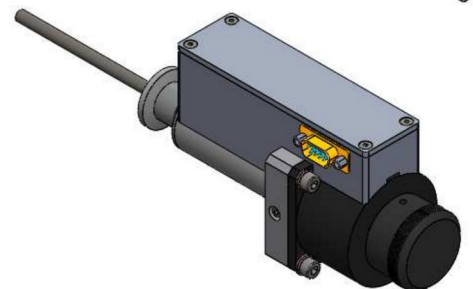
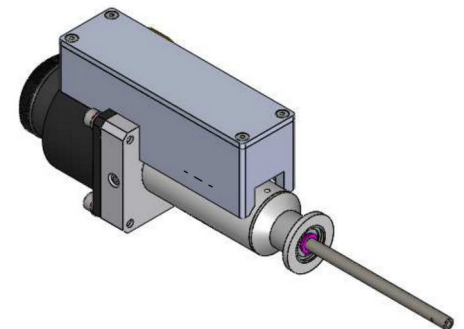
available with flanges **CF16 / CF40 / KF16 / KF40**

Allectra offers a full series of linear drives with stepper motor operation. Versions with 25, 50 and 100 mm travel are available.

They are offered on KF and CF flanges, the sizes , DN16CF / DN40CF / 16KF / 40KF are the standards

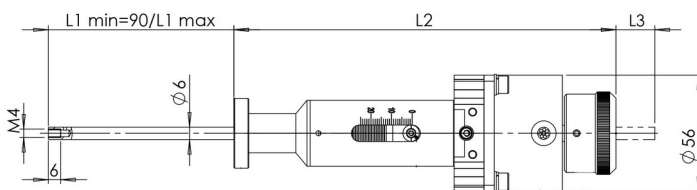
The drives are offered without limit switches (**SM**),  
with limit switch box, fully wired to Sub-D 9 connector (**SM-LS**),  
with limit switch box, including a high precision switch (**SM-LSPL**)

Specifications	
Vacuum	< 10 <sup>-10</sup> mbar (HV/ UHV)
Bakeout Temperature	220°C (motor removed)
Travel	25mm / 50mm / 100mm
Flanges	DN16CF / DN40CF / 16KF / 40KF
Axis	6mm Ø with M4 tapped hole (vented)
Min.axis length	90mm
Axial Load	5Kg
Travel	5µm/full step
Bellows	Edge welded bellows
Motor connector	Without limit switch box: open cable ends Versions LS and LSPL: 9 pin Sub-D, male
Phase current	1.4A (2 phase connection)
Options	
Flanges	other standard flanges and custom flanges
Axis	other lengths, modified end, 8mm Ø
Indexer / Encoder	an encoder with 500 counts/rev. can be added (Part code 612-CLD-ENC)



Top: Version without limit switch box  
(25mm travel with CF16 flange)  
Mid and low: With limit switch box  
25mm travel with KF16 flange)

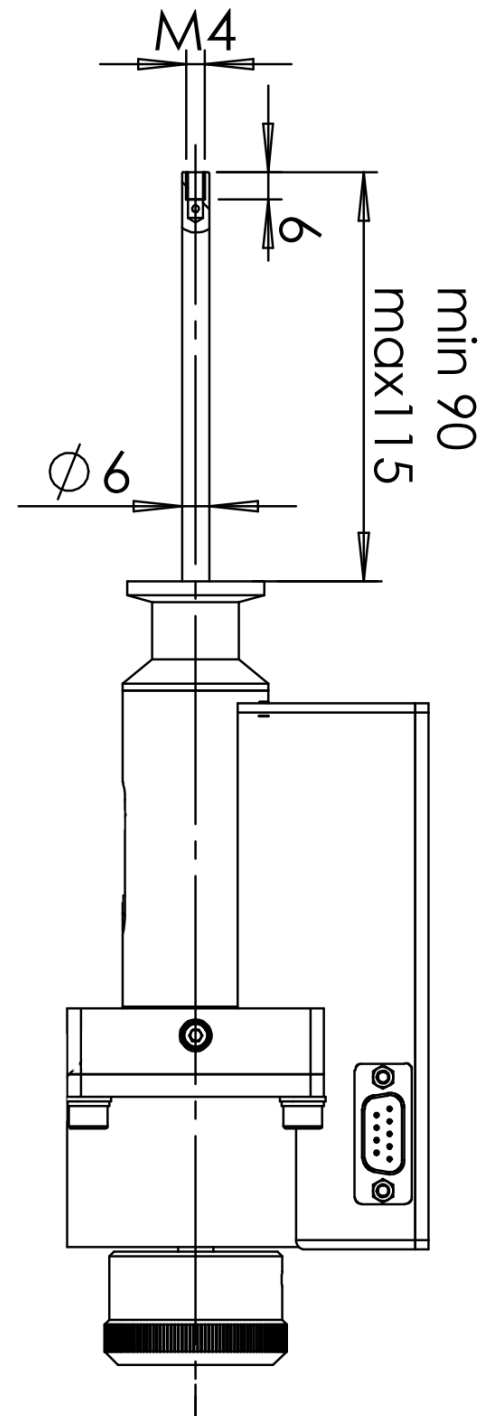
Left: Version without Limit switch box



## Specification of limit switch box / limit switches

The switches are mounted inside a closed box. Box including motor can be removed for bakeout.

Specifications	
<b>Standard Switches</b>	<b>- LS -</b>
Type	Mechanical switches with lever and reel, normally closed + normal open 2 off, adjustable
Hysteresis	typical 0.5mm travel
Electrical ratings	12V 6A / 220V 0,1A
<b>Precision Switch</b>	<b>- LSPL -</b>
Type	Rear switch (shaft retracted) is replaced by a 2 stage precision switch, adjustable
Front switch	Standard switch as above, normally closed is wired only
Rear switch	High precision: mechanical 2-stage switch with electronic enhancement. Stage 1: Signal with a repeatability < +/-5µm typical ~ +/-1µm Stage 2: normally closed switch
	The stage 1 position can be overrun by 1mm, The stage 2 switch opens typically 200-500µm after Stage 1.
Required power	5 – 24V DC
Signal outputs	The precision switch signals are voltage / current outputs. Output voltage = Supply voltage with a resistivity of 1.1 KOhm
	I max @5V: 4,5 mA I max @24V: 22 mA
<b>Options</b>	
Change of switch	Precision switch can be mounted in front position



Drawing of a DN16F version 612-CLD-25-LS-K16



The electronic enhancement box can directly plugged into the 9-pin Sub.D connector of the drive.