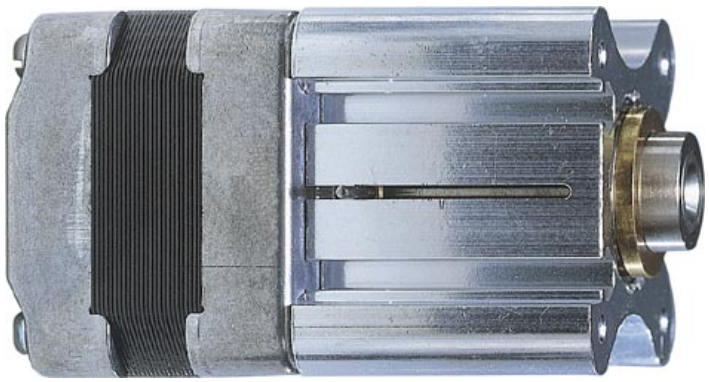
PRODUCT INFORMATION

SB7165 (R009)



2-phase linear actuator
Maximum Force 180N
2μm per half-step linear resolution

The linear actuators, type SB-7165 have been specially developed for applications requiring very accurate positioning.

The SB-7165 (R009) uses a 2-phase stepping motor as its prime mover. An integrated bronze guidance system with a highly accurate 0.8mm spindle pitch turns the rotary movement into a highly accurate linear movement by moving a 'piston'. This 'piston' has a special profile that stops any rotation occurring. By this utilizing this type of mechanism the SB-7165 (R009) can provide individual step resolutions of 2μm (when operating in half-step mode). The maximum linear force attainable is 180N (see the force / speed curve overleaf).

A Steel pin mounted on the guidance system which moves along a slot in the housing can be used for reference point positioning. Two groves in the actuator housing allow bolts to be fitted (not supplied) which can be used to secure proximity sensors (not supplied). It is possible to fit more than one sensor in this way (subject to sensor dimensions) so for example a sensor could be used at each end of the travel for moving to or for referencing.

Also we can deliver the following associated accessories:

Stepping motors drives - MICRO-2, Star2000 & PS6410; stepping motors (type: MOT; HN & HY); COBRA linear stepping motors; planetary gearboxes; display terminals; TP & NT-LC power supplies; heat sinks; and cables.

Typical areas of application are:

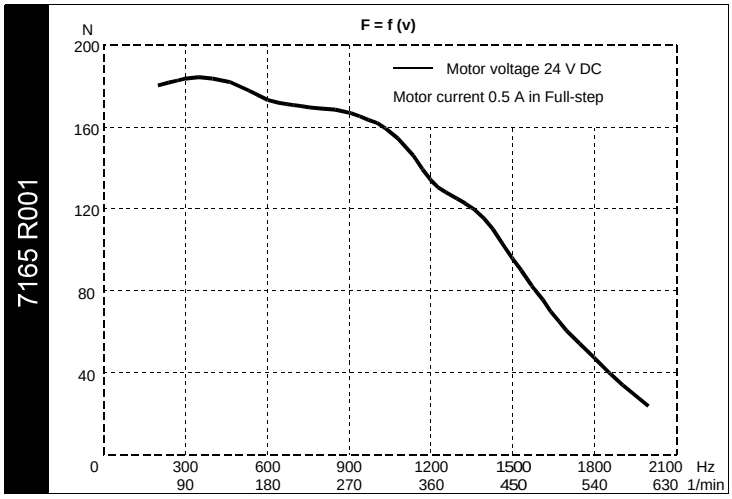
- Medical technology
- Optics
- Laser technology
- Measuring technique
- Instrument technique
- Telecommunications

Technical characteristics

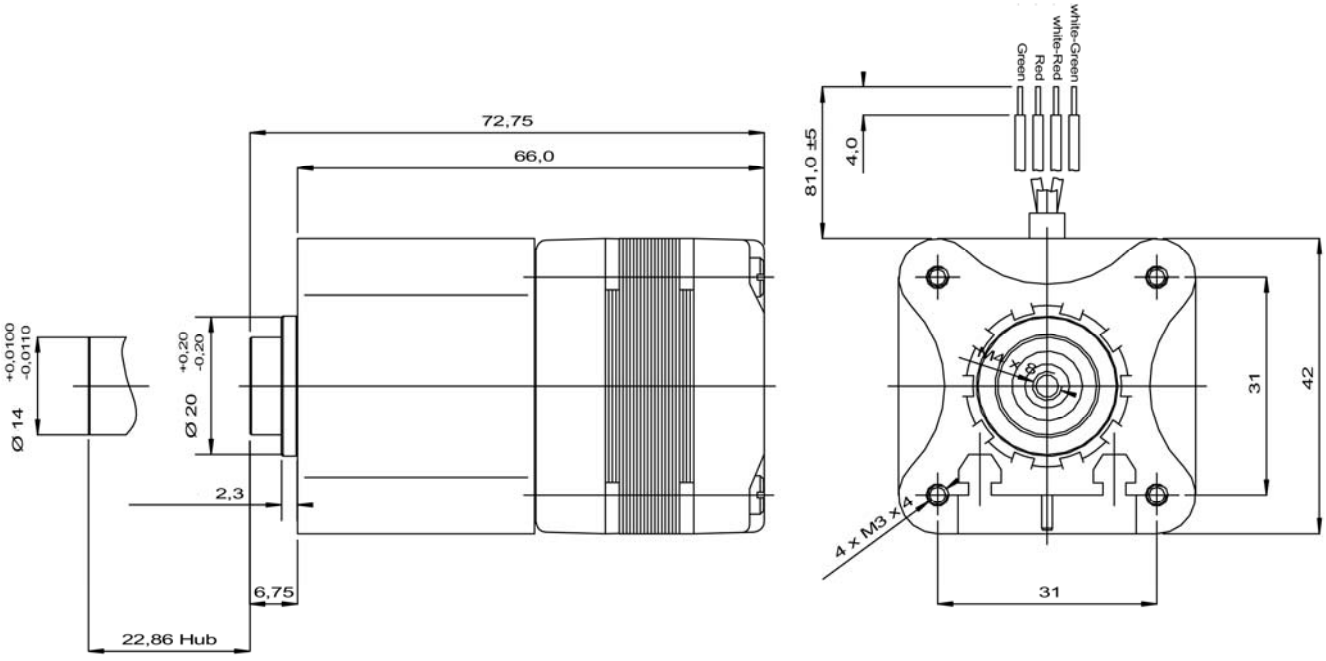
Max. feeding force	180N
Max. working stoke	22.86mm
Initial spring stress *	9N
Radial clearance max.	0.1mm
Spindle pitch	0.8mm
Steps / revolution	200full-step / 400 half-step
Phase current (bipolar)	0.52A
Wire colours	Phase A (Red, Red/White) Phase B (Green, Green/White)
Enclosure	IP30
Insulation class	B 130°C
Weight	320 g

**** This is the minimum force required to be kept on the actuator in order to minimize the mechanical hystereses in the system***

Force / Speed curve:



Dimensions:



ACP&D Limited
86 Rose Hill Road, Ashton-under-Lyne, Lancashire, OL6 8YF.
Tel: +44 (0)161 343 1884 Fax: +44 (0)161 343 7773email: sales@acpd.co.uk Website: www.acpd.co.uk