

940-0212

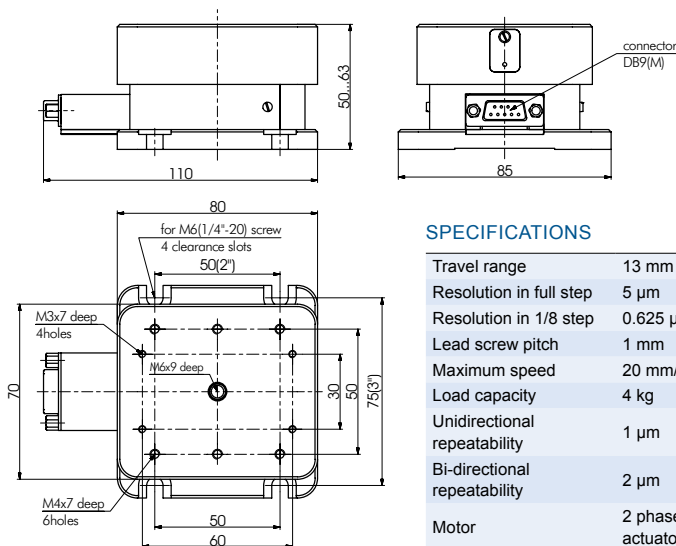
MOTORIZED Z STAGE



Compact Motorized Z Stage provides 13 mm travel range. The stages ideally fits many motorized linear stages. 960-0170 series motorized rotation stages can be directly mounted on the top of 940-0212.

RECOMMENDED CONTROLLERS

- 980-0040-USB *see page 8.189*
- 980-0030-RS232 *see page 8.188*



Code	Price, EUR
940-0212	975

SPECIFICATIONS

Travel range	13 mm
Resolution in full step	5 µm
Resolution in 1/8 step	0.625 µm
Lead screw pitch	1 mm
Maximum speed	20 mm/sec
Load capacity	4 kg
Unidirectional repeatability	1 µm
Bi-directional repeatability	2 µm
Motor	2 phase stepper actuator
Limit switch	2, optocoupler
Switch polarity	pushed is open
Weight	0.75 kg

940-0215

VERTICAL POSITIONING STAGE



940-0215-01

- True vertical elevation of the platform
- Compact design
- Long life time**
- Vacuum version available

940-0215-02 model constructed for operating in clean room, with cleanliness class up to 100. This model is also equipped with vacuum sleeve for dust removal from inside the stage, which accumulates during stage operation.

RECOMMENDED CONTROLLERS

- 980-0040-USB *see page 8.189*

Vertical positioning stage provides high-precision positioning and smooth travel for loads up to 10 kg. The wedge design, driven by precision rolled leadscrew, converts horizontal motion into vertical. Together with high quality linear bearing guide the system ensures rigid and smooth movement across all range of travel and

long lifetime. Precision bearings provide platform stiffness and stability while the screw mechanism assures positioning accuracy. For protection of mechanics, optical limit switches are installed.

Based on specifics of application other stepper motors or servos can be used. Stepper motor can be equipped with linear encoder and brake.

SPECIFICATIONS

Model	940-0215-01	940-0215-02
Travel range	12.7 mm (0.5 inch)	
Resolution in full step	2.5 µm	–
Resolution in 1/256 step	0.018 µm*	–
Encoder pulses per revolution	by request	4000
Travel per 1 pulse	–	0.18 µm
Lead screw pitch	1 mm	1,44 mm**
Wedge reduction rate	2 : 1	
Unidirectional Repeatability	1.5 µm	
Bidirectional Repeatability	3 µm	
Accuracy	10 µm	
Lift parallelism (to the base)	35 µm (by request up to 10 µm)	
Maximum speed	10 mm/s	12 mm/s
Maximum load capacity	10 kg (20 kg by request)	10 kg
Stepper motor	4247	–
Brushless DC motor	–	DB42-100
Brake	by request	+
Optocoupler end limit switches	2	3
Switch polarity	Pushed is open	
Motor connector	DB9(M)	By request
Material	Aluminium	
Finish	Black anodize hard cover	
Weight	3.5 kg	3.9 kg

* With 980-0040-USB controller.

** Screw coated with BlackIce TFE coating and equipped with plastic anti-backlash self-lubricating nut, which provide up time equal to 7 million cycles.