



## EM-Tec VS12 compact single action spring-loaded SEM sample vise

Products #12-000221 and #12-000321



### Description

The EM-Tec VS12 single action spring-loaded vise clamp includes one removable push rod and four dowel pins which fit into the top of the jaws. The maximum clamping capacity between the vise jaws is 12mm. Available with either the standard 3.2mm pin or an M4 threaded hole for mounting on the SEM sample stage.

### Operation

Consider wearing gloves to avoid contamination. To open the EM-Tec VS12 compact dual action spring-loaded vise clamp, insert the push rod jaw through the small hole on the side. Pushing on the push rod opens the jaws; place the sample between the vise jaws and gently release the push rod. The tension on the 2 springs will hold the sample between the moving and the fixed jaw. The sample can sit off center in this holder. The EM-Tec VS12 spring-loaded vise has been designed to operate with one hand and loading the sample with the other hand. For awkwardly shaped samples, 4 dowel pins can be inserted in the top of the vise jaws and the sample can be clamped between the 4 dowel pins. If the pins are not needed, remove them from the jaws. For samples which are thinner than 1mm, an alternative vise type holder with a screw should be considered. The spring tension is weaker when the jaws are (nearly) closed. For delicate samples, consider lining the jaws with conductive soft material.

### Specifications

Maximum clamping capacity between vise jaws:	12mm
Maximum clamping capacity between dowel pins:	18mm diameter
Dimensions (w/o push rod, dowels, pin):	30 x 25 x 12mm
SEM stage compatibility - standard pin:	#12-000221
- EM-Tec stage adapters M4:	#12-000321
- Hitachi M4	#12-000321
Material for vise and vise jaw:	Vacuum grade aluminium
Materials for guide rods and push rod:	Precision ground anti-magnetic stainless steel
Material for springs:	Low magnetic spring grade stainless steel
Material for dowel pins:	Precision ground anti-magnetic stainless steel

### Maintenance

The EM-Tec VS12 single action spring-loaded vise clamp is maintenance free. Do not use oil or grease on the guide rods or the push rods; this will cause contamination in the SEM. Do not allow debris to enter the holes for the guide rods of the sliding vise jaw.

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