

1.2. Types and Features of the Linear Ball Slide

●Linear Ball Slide with a Rack Model LSP

With Linear Ball Slide model LSP, the cage has a rack & pinion mechanism, thus to prevent the cage from slipping.

Also, since the cage does not slip even in vertical mount, this model is used in an even broader range of applications.

Note: Do not use the stopper as a mechanical stopper.



Model LSP

●Linear Ball Slide Model LS

Linear Ball Slide model LS is a unit-type linear system for finite motion that has a structure where balls are arranged between the base and the slider via a needle roller raceway.

It is incorporated with a stopper mechanism, thus to prevent damage deformation caused by collision between the cage and the end-plate.

Note: Do not use the stopper as a mechanical stopper.



Model LS

●Linear Ball Slide with a Cylinder Model LSC

Linear Ball Slide with a cylinder model LSC contains an air cylinder for drive inside the base. Feeding air from the two ports on the side face of the base allows the slide to perform reciprocating motion. Since the cylinder is of double-acting type, horizontal traveling speed can be adjusted using the speed controller. The cylinder and the piston are made of a corrosion resistant aluminum alloy, and their surfaces are specially treated to increase wear resistance and durability. Additionally, the cage has a rack & pinion mechanism, thus enabling the cage to operate without slipping.

Air-feeding ports for piping are provided on one side face, ensuring a certain degree of operability and easy assembly even if the installation site has a limited space and is complex.

The table on the right shows the specifications of the air cylinder incorporated in model LSC.



Model LSC

Cylinder specifications

Type of action:	double-acting
Fluid used:	air (un-lubricated)
Working pressure:	100 kPa to 700 kPa (1 kgf/cm ² to 7 kgf/cm ²)
Stroke speed:	50 to 300 mm/s

Note: Do not use the stopper as a mechanical stopper.

Speed Controller

Fig. 2 shows the shape of the speed controller.

Note: The speed controller is optional.
(control method: meter-out)

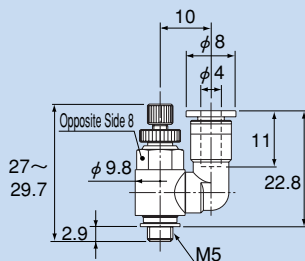


Fig. 2 Shape of the Speed Controller (common to all model numbers)

Dedicated Unit Base Model B

With Linear Ball Slide model LSC, a limit switch for detecting the stroke end can be mounted using a dedicated unit base (Fig. 3). When fine positioning is required, a dedicated stopper can be mounted on the unit base to adjust the position (model LSC1015 is attached with the unit base as standard).

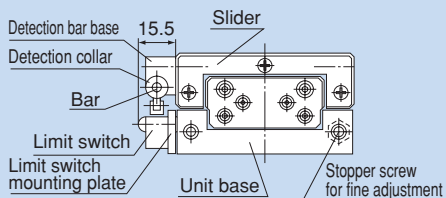


Fig. 3 Unit Base and Limit Switch Installation