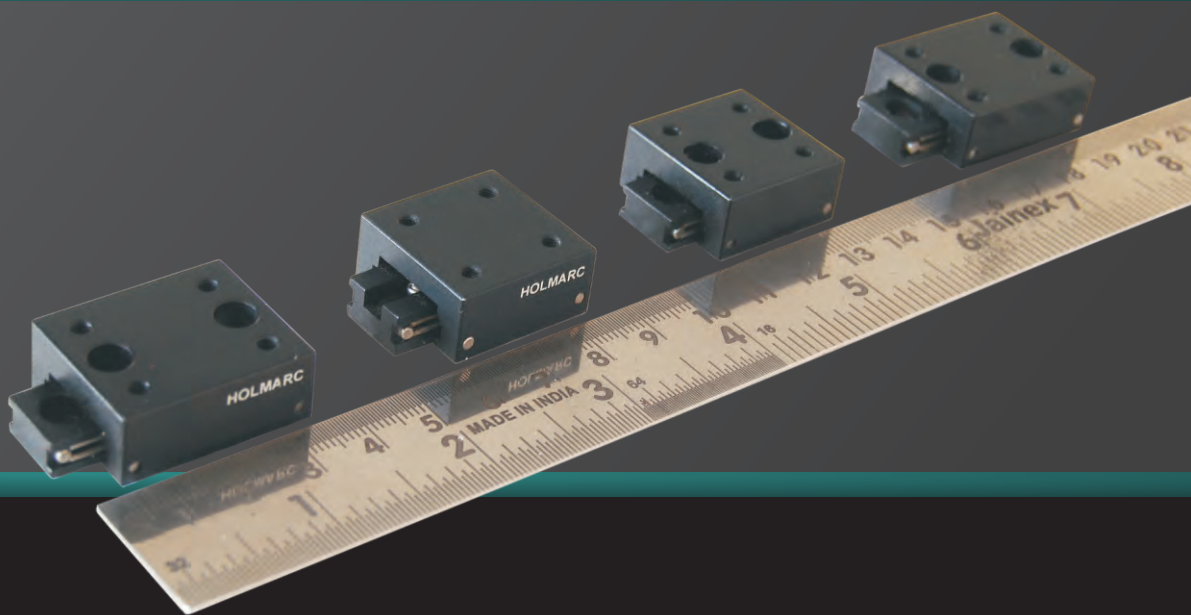


***PRODUCT CATALOGUE***

**LINEAR SLIDES**



# Linear Motion Slides

Linear motion Slides are ready to fit and cost-effective bearing assemblies for achieving straight-line movements in a mechanism. Essentially, the linear motion slide consists of two parts, a fixed base and a moving carriage. Rolling elements, balls or rollers provide the interface between base and carriage by perfectly rolling on four surfaces arranged at 90 degree, called guide ways. In the case of slides from HOLMARC, hardened and ground rods act as guide ways. Wear and tear is negligible even after long use as there is a perfect rolling contact between rolling elements and guide ways. Friction is very less and in most cases, coefficient of friction is less than 0.002. The slides can support heavy loads without compromising performance accuracies. Factory pre-loading of the slides during assembly practically eliminates play and wobble.



The use of these readily available slide units saves time during design as well as for manufacturing. Compared to other options for linear motion, slide assemblies are cost effective, maintenance free and durable.

Linear slides find a variety of applications in the following areas,

1. Industrial automation
2. Robotics
3. Metrology and measuring equipments
4. Medical equipments
5. Product packing
6. Textile industries
7. Electronic manufacturing
8. Machine tool equipments
9. Manufacturing processes like welding, drilling, wood industries etc:

HOLMARC offers wide range of linear slide assemblies to choose from. Our slides are set under four major categories namely:

- ▶ Miniature ball slides
- ▶ Spring loaded slides
- ▶ Ball slides
- ▶ Roller slides

Dozens of models depending upon footprint and travel range are available in each category.

**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly

# Miniature Ball Slides

Miniature Slides are designed as complete and compact assemblies for space restricted linear motion applications. As in the case of other standard slides, hardened and precision ground alloy steel rods are used as guide ways. Play and wobble are practically eliminated by pre-loading these slides during assembly at our factory. Smooth and frictionless motion is guaranteed by ensuring perfect rolling motion between balls and guide ways.

HOLMARC manufactures miniature slides in four series depending on their width and thickness. Many models are available in each series for differing travel ranges. There are mounting holes at top (moving part) and base (fixed part) for the ease of use.

In addition to these standard models, HOLMARC also manufactures custom slides. We also entertain custom specification of mounting holes without any increase in cost from standard models.

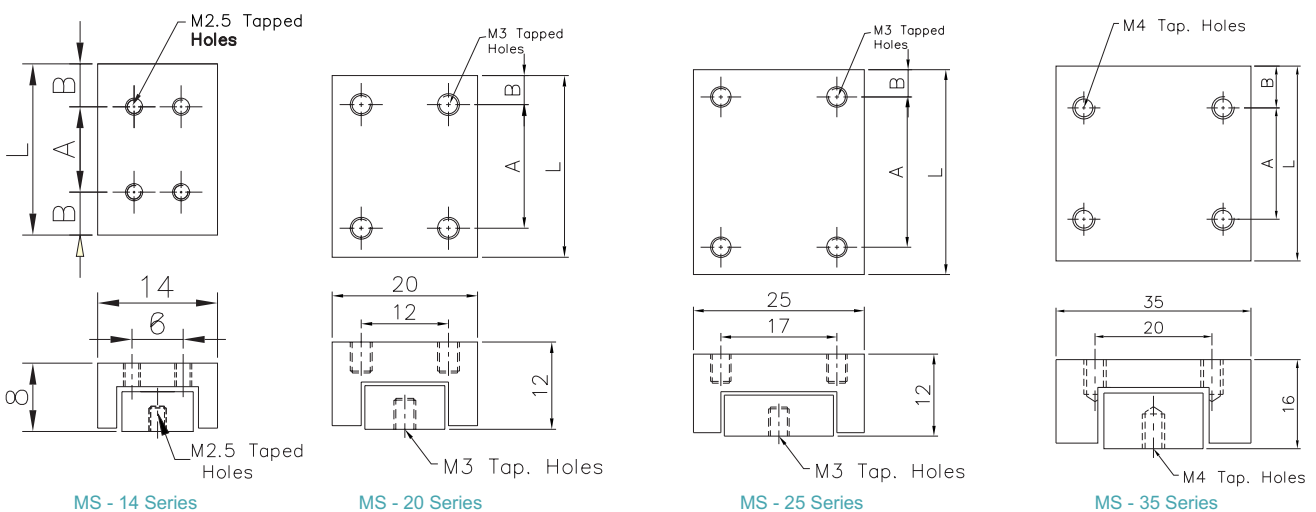
## Features:

- ▶ Pre-loaded adjustment prevents side play and backlash
- ▶ Steel rods, ground over the entire length, reduce co-efficient of friction.
- ▶ Light in Weight.
- ▶ Built-in holes simplify installation and component mounting.
- ▶ Constructed in aluminium alloy with black anodized finish.

## Specification:

- ▶ Co-efficient of friction : 0.002
- ▶ Positional Repeatability : 0.002 mm
- ▶ Straight - line accuracy : 0.01 mm / 25mm of travel

MS - 14 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MS - 14 x 20	10	0.3	20	12	4
	MS - 14 x 25	12	0.5	25	17	4
	MS - 14 x 30	15	0.7	30	22	4
	MS - 14 x 40	25	1	40	32	4
MS - 20 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MS - 20 x 20	10	0.5	20	10	5
	MS - 20 x 25	15	1	25	15	5
	MS - 20 x 30	20	2	30	20	5
	MS - 20 x 40	25	3	40	30	5
MS - 25 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MS - 25 x 25	10	1	25	15	5
	MS - 25 x 30	15	3	30	20	5
	MS - 25 x 40	20	4	40	30	5
	MS - 25 x 50	25	5	50	40	5
MS - 35 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MS - 35 x 35	15	3	35	20	7.5
	MS - 35 x 40	20	4	40	25	7.5
	MS - 35 x 50	30	5	50	35	7.5
	MS - 35 x 75	35	7	75	60	7.5



**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly

# Spring-Loaded Miniature Ball Slides

Spring loaded slides are suitable for gauging and miniature cam follower applications. In this case, a tension spring loads the carriage against the base. All other specifications remain same as that of a miniature ball slide. Holmarc undertake development of custom miniature slides for OEM applications, irrespective of order quantity.



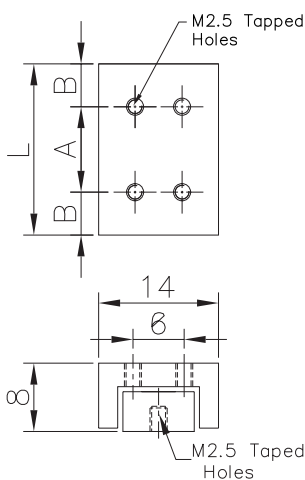
## Features:

- ▶ Pre-loaded adjustment prevents side play and backlash.
- ▶ Steel rods, ground over entire length, reduce co-efficient of friction.
- ▶ Light in Weight.
- ▶ Built-in holes simplify installation and component mounting.
- ▶ Constructed in aluminium alloy with black anodized finish.

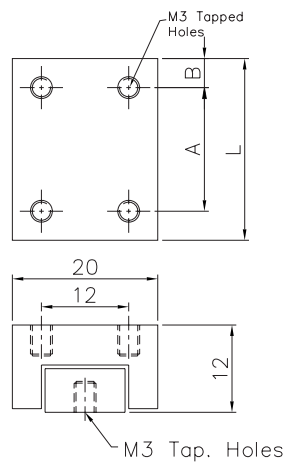
## Specification:

- ▶ Co-efficient of friction : 0.002
- ▶ Straight - line accuracy : 0.01 mm / 25mm of travel

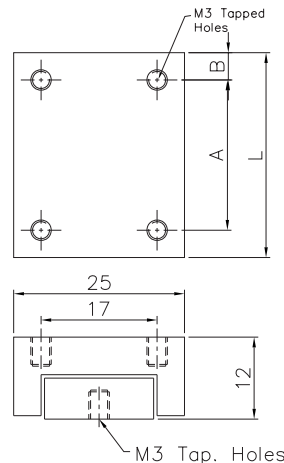
	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
MSS - 14 Series	MSS - 14 x 20	10	0.3	20	12	4
	MSS - 14 x 25	12	0.5	25	17	4
	MSS - 14 x 30	15	0.7	30	22	4
	MSS - 14 x 40	25	1	40	32	4
MSS - 20 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MSS - 20 x 20	10	0.5	20	10	5
	MSS - 20 x 25	15	1	25	15	5
	MSS - 20 x 30	20	2	30	20	5
	MSS - 20 x 40	25	3	40	30	5
MSS - 20 x 50	30	5	50	40	5	
MSS - 25 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MSS - 25 x 25	10	3	25	15	5
	MSS - 25 x 30	15	4	30	20	5
	MSS - 25 x 40	20	5	40	30	5
	MSS - 25 x 50	25	6	50	40	5
MSS - 25 x 75	35	7	75	50	5	
MSS - 35 Series	Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
	MSS - 35 x 35	15	3	35	20	7.5
	MSS - 35 x 40	20	4	40	25	7.5
	MSS - 35 x 50	30	5	50	35	7.5
MSS - 35 x 75	35	7	75	60	7.5	



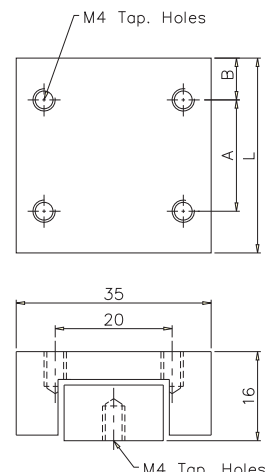
MSS - 14 Series



MSS - 20 Series



MSS - 25 Series



MSS - 35 Series

**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly

# Ball Slides

Ball slides as the name suggests, use balls as rolling elements. Each ball will have four point contact with the guide ways. Point contact rolling helps in self cleaning of the rolling path on the guide ways. Hence, ball slides are maintenance free and are suitable for operation without lubrication. Ball slides exhibit significantly less friction compared to roller slides. Due to this feature, for applications where smooth, low friction movements are more important than load capacity and shock resistance, ball slides make better choice.

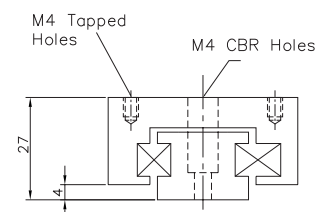
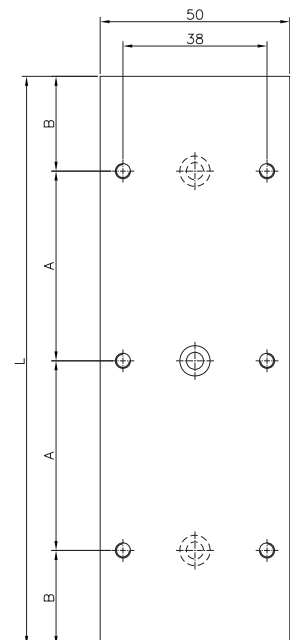
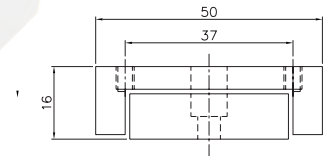
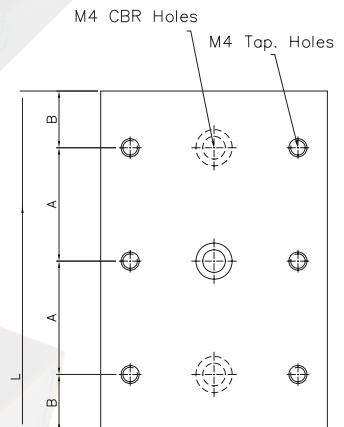
HOLMARC manufactures custom ball slides for OEM applications as well.

## Features:

- ▶ Factory Pre-load adjustment prevents side play and backlash.
- ▶ Light weight aluminium carriage and base.
- ▶ Steel shafts, ground over entire length are used as guide ways.
- ▶ Built-in mounting holes make its use easy and time efficient.
- ▶ High accuracy and repeatability.
- ▶ No lubrication required.

## Specification:

- ▶ Co-efficient of friction : 0.002
- ▶ Positional Repeatability : 0.002 mm
- ▶ Straight - line accuracy : 0.01 mm/25mm of travel.



## MS - 50 Series Slides

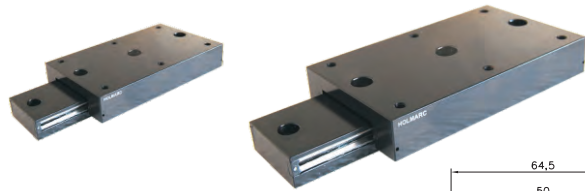
Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
MS-50x50	30	4	50	15	10
MS-50x60	40	5	60	20	10
MS-50x75	50	6	75	25	12.5
MS-50x100	75	7	100	25	12.5

## ABS - 50 Series Slides

Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
ABS-50X75	25	10	75	50	12.5
ABS-50X75A	12.5	12	75	50	12.5
ABS - 50x100	50	18	100	75	12.5
ABS - 50x100A	25	24	100	75	12.5
ABS - 50x150	100	18	150	50	25
ABS - 50x150A	50	24	150	50	25
ABS - 50x150B	25	30	150	50	25
ABS - 50x200	150	24	200	50	25
ABS - 50x200A	100	30	200	50	25
ABS - 50x200B	50	38	200	50	25

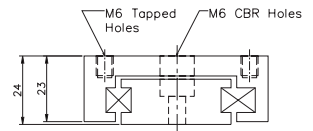
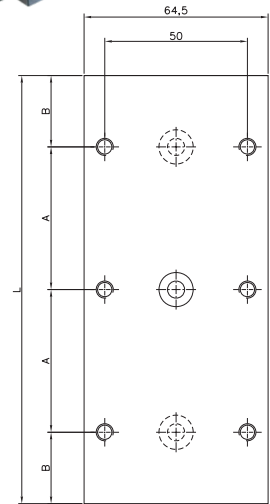
**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly





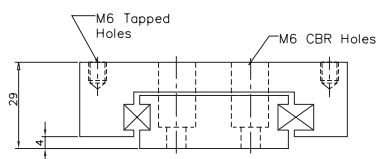
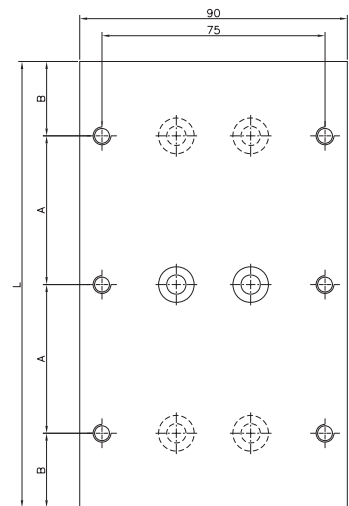
## ABS - 65 Series Slides

Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
ABS - 65x75	25	10	75	50	12.5
ABS - 65x75A	12.5	14	75	50	12.5
ABS - 65x100	50	12	100	75	12.5
ABS - 65x100A	25	16	100	75	12.5
ABS - 65x150	100	18	150	50	25
ABS - 65x150A	50	24	150	50	25
ABS - 65x150B	25	30	150	50	25
ABS - 65x200	150	24	200	50	25
ABS - 65x200A	100	30	200	50	25
ABS - 65x200B	50	38	200	50	25
ABS - 65x200C	25	44	200	50	25



## ABS - 90 Series Slides

Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
ABS - 90x100	50	18	100	75	12.5
ABS - 90x100A	25	24	100	75	12.5
ABS - 90x150	100	16	150	50	25
ABS - 90x150A	75	21	150	50	25
ABS - 90x150B	50	24	150	50	25
ABS - 90x200	150	24	200	50	25
ABS - 90x200A	100	30	200	50	25
ABS - 90x200B	50	38	200	50	25
ABS - 90x250	200	28	250	50	25
ABS - 90x250A	150	34	250	50	25
ABS - 90x250B	100	40	250	50	25
ABS - 90x250C	50	46	250	50	25
ABC - 90x300	250	36	300	50	25
ABS - 90x300A	200	42	300	50	25
ABS - 90x300B	150	48	300	50	25
ABS - 90x300C	100	54	300	50	25



**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly

# Roller Slides

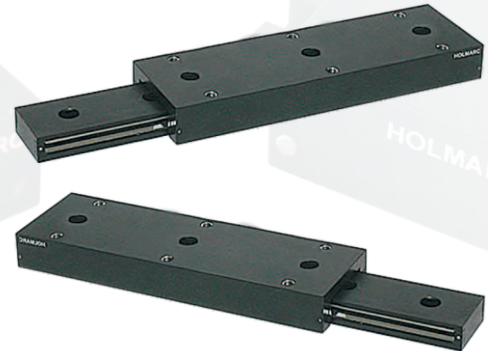
In roller slides, rollers which are placed alternately crisscrossed to each other are used as rolling elements. Hardened, precision ground and flattened rods are used as guide ways. The rollers are encased in a nylon cage. A line contact is maintained between guide ways and rollers throughout the travel range, achieving perfect rolling motion. Load capacity is increased at least 10 fold as a result of line contact of rollers compared to ball slides using equal diameter balls. Co-efficient of friction in roller slides is 0.004, when preloaded. This is almost double that of ball slides of similar size. Where load capacity is more important factor than friction, roller slides are preferable.

## Features:

- ▶ Factory pre-Load adjustment prevents side play and back lash.
- ▶ Light Weight Aluminium carriage and base.
- ▶ Alternately crossed rollers handle force in any direction.
- ▶ Built-in mounting holes make installation easy and time efficient.
- ▶ High accuracy and repeatability.

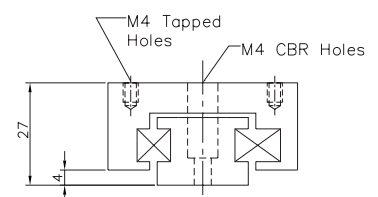
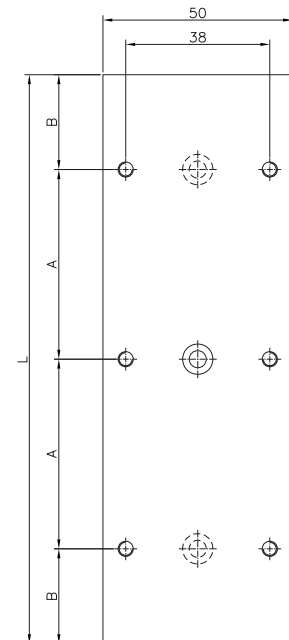
## Specification:

- ▶ Co-efficient of friction : 0.004
- ▶ Positional Repeatability : 0.002 mm
- ▶ Straight- line accuracy : 0.01 mm/25mm of travel



## ARS - 50 Series Slides

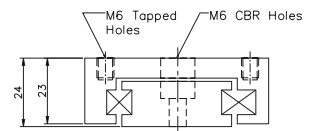
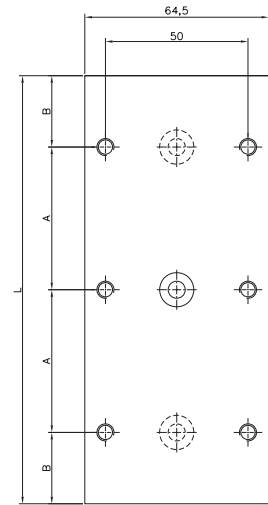
Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
ARS - 50x100	50	35	100	75	12.5
ARS - 50x100A	25	45	100	75	12.5
ARS - 50x150	100	50	150	50	25
ARS - 50x150A	50	60	150	50	25
ARS - 50x150B	25	75	150	50	25
ARS - 50x200	150	55	200	50	25
ARS - 50x200A	100	65	200	50	25
ARS - 50x200B	50	95	200	50	25
ARS - 50x200C	25	115	200	50	25
ARS - 50x250	200	50	250	50	25
ARS - 50x250A	150	70	250	50	25
ARS - 50x250B	100	100	250	50	25
ARS - 50x250C	50	125	250	50	25
ARS - 50x300	300	70	300	50	25
ARS - 50x300A	200	85	300	50	25
ARS - 50x300B	150	105	300	50	25
ARS - 50x300C	100	135	300	50	25
ARS - 50x300D	50	155	300	50	25



**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly

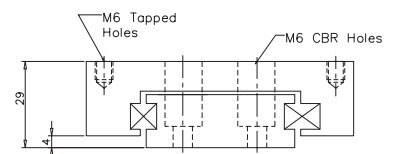
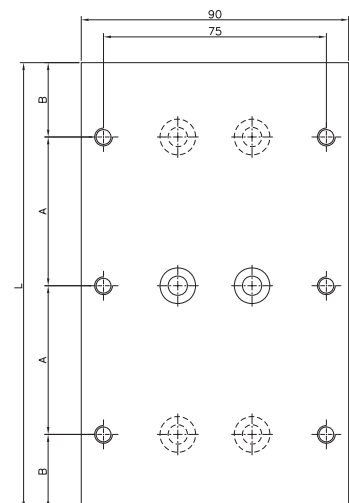
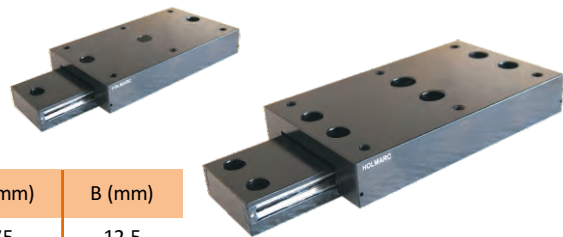
## ARS - 65 Series Slides

Model No:	Travel(mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
ARS - 65x75	25	30	75	50	12.5
ARS - 65x75A	12.5	40	75	50	12.5
ARS - 65x100	50	35	100	75	12.5
ARS - 65x100A	25	45	100	75	12.5
ARS - 65x150	100	70	150	50	25
ARS - 65x150A	50	60	150	50	25
ARS - 65x150B	25	75	150	50	25
ARS - 65x200	150	50	200	50	25
ARS - 65x200A	100	65	200	50	25
ARS - 65x200B	50	95	200	50	25
ARS - 65x200C	25	115	200	50	25
ARS - 65x250	200	50	250	50	25
ARS - 65x250A	150	70	250	50	25
ARS - 65x250B	100	100	250	50	25
ARS - 65x250C	50	125	250	50	25
ARS - 65x300	250	60	300	50	25
ARS - 65x300A	200	85	300	50	25
ARS - 65x300B	150	105	300	50	25
ARS - 65x300C	100	135	300	50	25



## ARS - 90 Series Slides

Model No:	Travel (mm)	Load capacity (kg)	L (mm)	A (mm)	B (mm)
ARS - 90x100	50	35	100	75	12.5
ARS - 90x100A	25	45	100	75	12.5
ARS - 90x150	100	50	150	50	25
ARS - 90x150A	50	60	150	50	25
ARS - 90x150B	25	75	150	50	25
ARS - 90x200	150	40	200	50	25
ARS - 90x200A	100	65	200	50	25
ARS - 90x200B	50	95	200	50	25
ARS - 90x200C	25	115	200	50	25
ARS - 90x250	200	50	250	50	25
ARS - 90x250A	150	70	250	50	25
ARS - 90x250B	100	100	250	50	25
ARS - 90x250C	50	125	250	50	25
ARS - 90x300	250	60	300	50	25
ARS - 90x300A	200	85	300	50	25
ARS - 90x300B	150	105	300	50	25
ARS - 90x300C	100	135	300	50	25



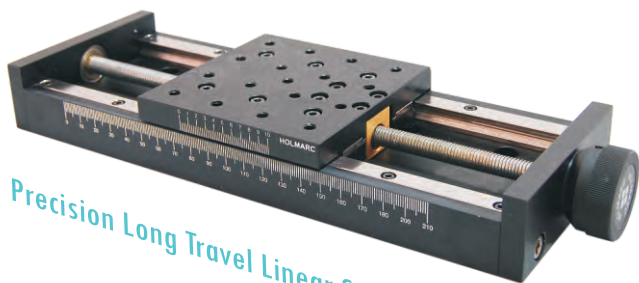
**Note:** Load capacity is calculated on the assumption that all balls/rollers are loaded uniformly



The products listed above are only our standard models, HOLMARC design and develop slides for custom applications. We thank you whole heartedly for viewing our e-brochure. Hope you have found an appropriate design for your application. To know more details or to share your custom requirements, you may please contact us or even mail us to sales@holmarc .com .We await for an early opportunity to work with you.

## Product Overview

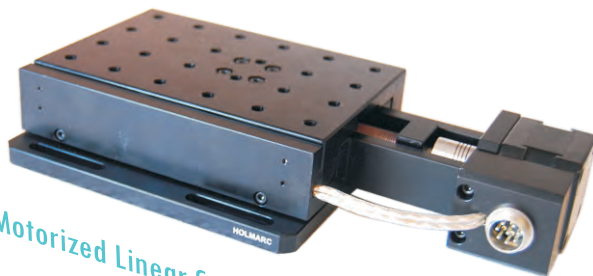
Holmarc offers a wide range of linear motion equipments to full fill your application.



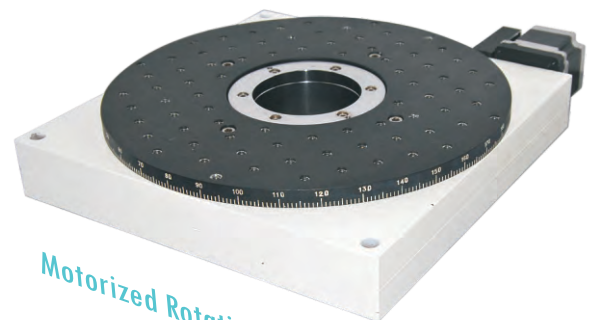
Precision Long Travel Linear Stage



XYZ Stage



Motorized Linear Stage



Motorized Rotation Stage

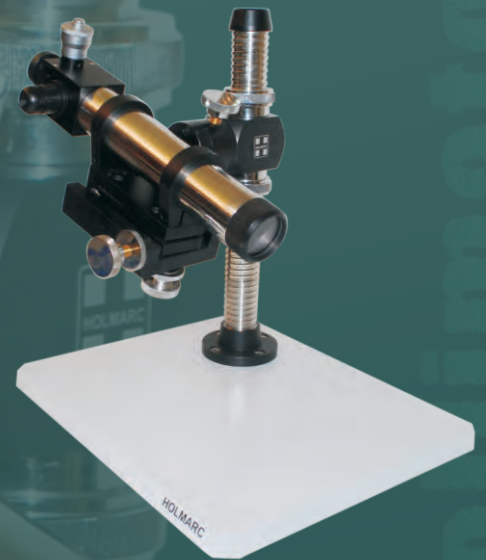


Motorized Long Trvel Linear Stage

# Autocollimator

Autocollimator **Model no: HO-AS-30** from holmarc is meant for general purpose factory measurements. It can be used for checking flatness, straight-line accuracy of moving guide ways, perpendicularity, etc.. It can be also used for applications like precision alignment, detection of angular movement and verification of angle standards.

Holmarc's autocollimator has a resolution of 3 arc second with much higher sensitivity. The instrument has high precision optics assembled in a stainless body. LED provides illumination. A height adjustable stand with a rigid base comes a standard accessory. The stand has a fine kinematic positioner for mounting the autocollimator. The positioned helps to align the collimator in two angular axes.



## Advantages of Holmarc's Autocollimator

- ▶ High accuracy Angle measurements
- ▶ Non contact measurement
- ▶ Repeatable Measurements
- ▶ LED illumination

## Application

- ▶ Measuring Angle
- ▶ Straightness
- ▶ Flatness
- ▶ Squareness
- ▶ Parallelism

## Specification

Model	=	HO-AS-30
Resolutions	=	3 arc second
Measurement Axis	=	Single
Range of measurement	=	30 minutes
Read out	=	Micrometer Head
Magnification	=	14x
Field of view	=	28 degree
Clear aperture	=	38 mm
Reticle Illumination	=	LED, Green
Power	=	220V, 50 Hz

# PROFILE PROJECTOR

## Specification

### Protractor Screen

Effective Screen Diameter	=	300mm
Screen Material	=	Fine Ground Glass
Screen rotation	=	$\pm 360^\circ$
Reference Line	=	$90^\circ$ cross line
Angle Display	=	scale with resolution 2'

Projection Lens: = 10X, 20X & 50X

### Magnification Accuracy

Contour	=	$\pm 0.10\%$ or less
Surface	=	$\pm 0.15\%$ or less

### Contour illumination

Light source = High Bright LED

### Surface illumination

Light Source = High Bright LED

### XY Stage

XY Travel	=	25mmx25mm
Resolution	=	10 Micron
Measurement Type	=	Micrometer
XY Stage Table Size	=	145mmx145mm
Working Area	=	60mm

Profile projector **Model no: HO-PP-25x25** from Holmarc is a desktop model meant for inspection and quality control in engineering industries. The instrument makes use of high quality lenses, mirrors and mechanics, all manufactured in-house under stringent quality control. A unique feature of our projector is the use of LEDs for illumination. LEDs have long life span and do not need replacement as in the case of halogen lamps.



# LINEAR SLIDES

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*Holmarc manufactures wide range of products for education, research and industry. We have distributors and collaborators throughout the world and are well equipped to serve academic and scientific community. You are welcome to visit us at [www.holmarc.com](http://www.holmarc.com) to know more about our company, products & services.*



*Feel free to contact our Engineers*

visit us: [www.holmarc.com](http://www.holmarc.com)

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