Code	Rolle distance	Table size	Accuracy of α at 30°
4155-100	100mm	130×30mm	±5s
4155-200	200mm	230×30mm	±5s
4155-300	300mm	345×40mm	±5s

1-Bezel
2-Screw
3-Main part
4-Cylinder
5-Wrench

1. Sine bar is a measuring instrument that applies the sine principle to produce angles with the help of a gauge block, mainly used to measure the angle of a workpiece and the taper of a cone.

2. The sine bar consists of a main body with a precision working plane and two precision cylinders, as shown in Figure 1, which can be surrounded by a plate using locking screws, which serves as a locating plate for the parts to be placed during measurement.

3. Clean the working surface of the sine bar and the gauge block/platform surface to ensure that the cylinder is in contact with the gauge block/platform line and is free from impurities or wear.

4. Use:
 --- As shown in Figure 2, according to the required angle α according to the formula :
H = sin α * E (or check Schedule 1, , E=100mm) to calculate the height of the gauge block (H is the height of the block, E is the centre distance between the two cylinders), put the gauge block under the cylinder to pad the right.
 ---Sine bars are generally used to measure angles no more than 45°.

Caveat:
 ---Keep the sine bar clean and apply anti-rust oil after use.
 ---It is prohibited to strike the cylinder to prevent misalignment of the centre distance.

The front and back ends and two sides
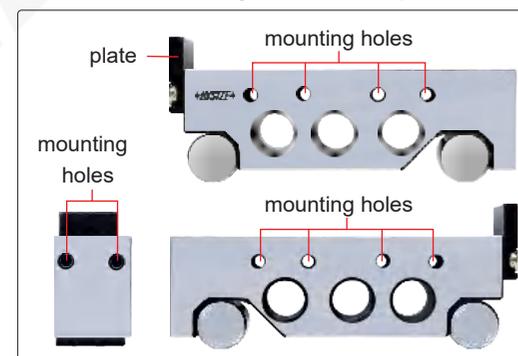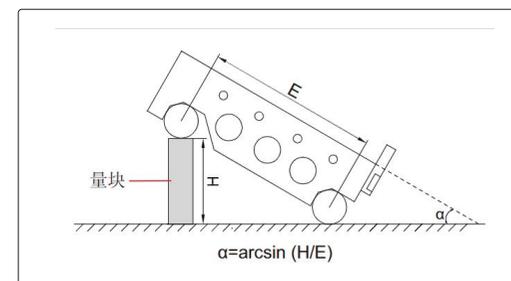have mounting holes to install plate

fig.1

$$\alpha = \arcsin(H/E)$$

fig.2

MN-4155-E

V1

Schedule 1 Sinusoidal conversion table   (the value of H when E=100mm)

perspectives	0'	10'	20'	30'	40'	50'
0°	0.000	0.291	0.582	0.873	1.164	1.454
1°	1.745	2.036	2.327	2.618	2.908	3.199
2°	3.490	3.781	4.071	4.362	4.653	4.943
3°	5.234	5.524	5.814	6.105	6.395	6.685
4°	6.976	7.266	7.556	7.846	8.136	8.426
5°	8.716	9.005	9.295	9.585	9.874	10.164
6°	10.453	10.742	11.031	11.320	11.609	11.898
7°	12.187	12.476	12.764	13.053	13.341	13.629
8°	13.917	14.205	14.493	14.781	15.069	15.356
9°	15.643	15.931	16.218	16.505	16.792	17.097
10°	17.365	17.651	17.937	18.224	18.509	18.795
11°	19.081	19.366	19.652	19.937	20.222	20.507
12°	20.791	20.076	21.360	21.644	21.928	22.212
13°	22.495	22.778	23.062	23.345	23.627	23.910
14°	24.192	24.474	24.756	25.038	25.320	25.601
15°	25.882	26.163	26.443	26.724	27.004	27.284
16°	27.564	27.843	28.123	28.402	28.680	28.959
17°	29.237	29.515	29.793	30.071	30.348	30.625
18°	30.902	31.178	31.454	31.730	32.006	32.282
19°	32.557	32.832	33.106	33.381	33.655	33.929
20°	34.202	34.475	34.748	35.021	35.293	35.565
21°	35.837	36.108	36.379	36.650	36.921	37.191
22°	37.461	37.730	37.999	38.268	38.537	38.805
23°	39.073	39.341	39.608	39.875	40.142	40.408
24°	40.674	40.939	41.204	41.469	41.734	41.998
25°	42.262	42.525	42.788	43.051	43.313	43.575
26°	43.837	44.098	44.359	44.620	44.880	45.140
27°	45.399	45.658	45.917	46.175	46.433	46.690
28°	46.947	47.204	47.460	47.716	47.971	48.226
29°	48.481	48.735	48.989	49.242	49.495	49.748
30°	50.000	50.252	50.503	50.754	51.004	51.254
31°	51.504	51.753	52.003	52.250	52.498	52.745
32°	52.992	53.238	53.484	53.730	53.975	54.220
33°	54.464	54.708	54.951	55.194	55.436	55.678
34°	55.919	56.160	56.401	56.641	56.880	57.119
35°	57.358	57.596	57.833	58.070	58.307	58.543

perspectives	0'	10'	20'	30'	40'	50'
36°	58.779	59.014	59.248	59.482	59.716	59.949
37°	60.182	60.414	60.645	60.876	61.107	61.337
38°	61.566	61.795	62.024	62.251	62.479	62.706
39°	62.932	63.158	63.383	63.608	63.832	64.056
40°	64.279	64.501	64.723	64.945	65.166	65.386
41°	65.606	65.825	66.044	66.262	66.480	66.697
42°	66.913	67.129	67.344	67.559	67.773	67.987
43°	68.200	68.412	68.624	68.835	69.046	69.256
44°	69.466	69.675	69.883	70.001	70.298	70.505
45°	70.711	70.916	71.121	71.325	71.529	71.732

MN-4155-E

V1

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