

Compact Slide AXH Series(φ 6-φ 20)



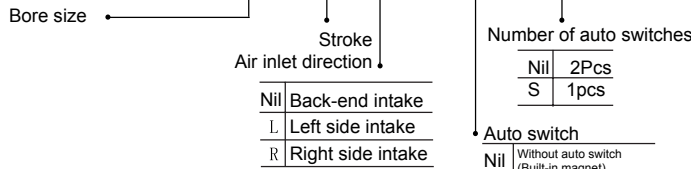
- *With new high rigidity linear guide.
- *Small auto switches capable.
- *Piping is possible in 3 directions.
- *Standard rubber bumper at both ends.

Specifications

Bore Size(mm)	6	10	16	20
Fluid	Air			
Action	Double acting			
Min. operating pressure	0.15MPa	0.06MPa	0.05MPa	
Max. operating pressure	0.7 MPa			
Ambient and fluid temperature	Without auto switch : -10 ~ +70°C (No freezing) With auto switch : -10 ~ +60°C			
Piston speed	50 ~ 500 mm/s			
Allowable kinetic energy(J)	0.0125	0.025	0.05	0.1
*Lubrication	Non-lube			
Cushion	Rubber bumper on both ends			
Stroke length tolerance (mm)	+1.0 0			
Auto switch (Option)	Solid state auto switch: SW-M9□			
Connection diameter	M5 x 0.8			

How to Order

Built-in magnet: AXH 10 - 30 - M9B

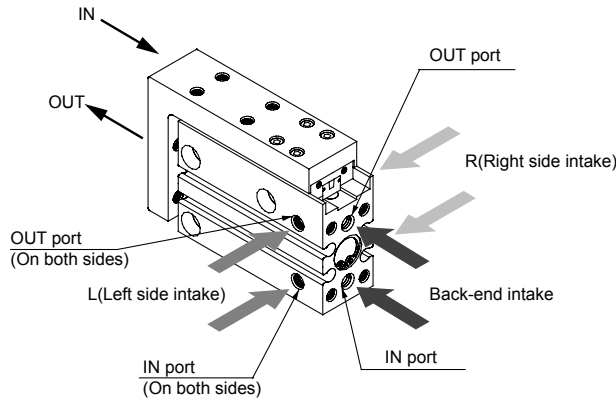


Stroke/Auto switch option

Bore size (mm)	Standard stroke (mm)	Applicable Auto Switch
6		
10	5, 10, 15, 20, 25,	M9B(L) M9N(L)
16	30, 40, 50, 60	
20		

Note)Lead wire length symbols:
1m.....Nil(Example)M9B
3m..... L (Example)M9BL

Piping is possible in 3 directions



Application

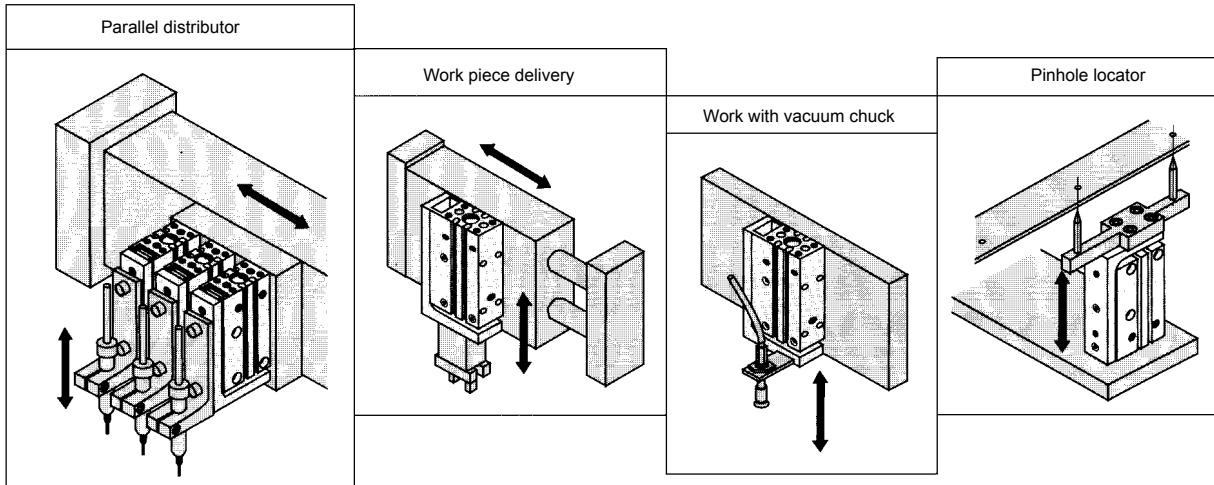
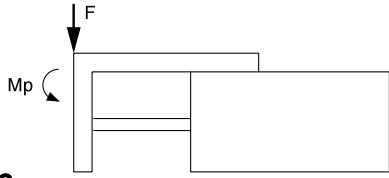
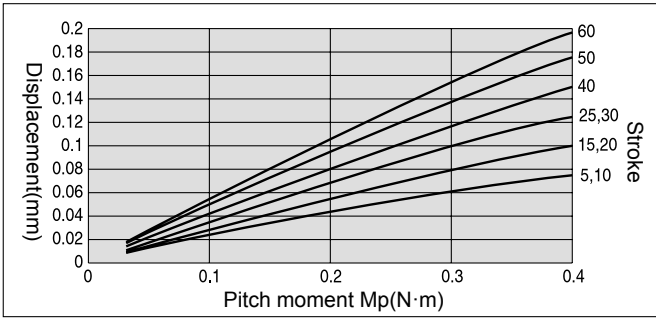


Table Displacement

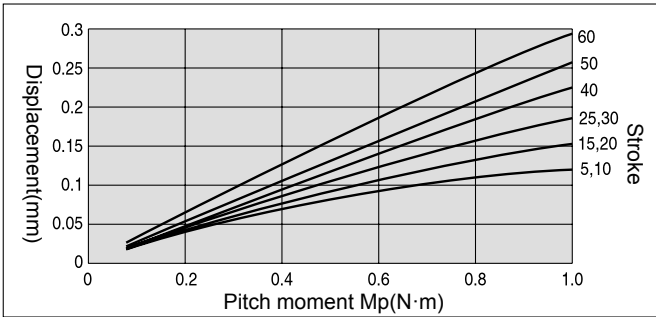
Table Displacement due to Pitch Moment(Reference)



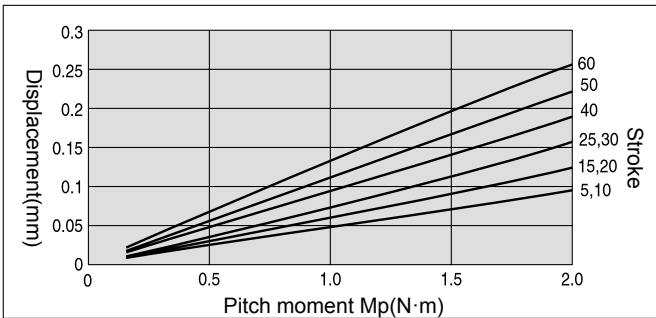
AXH6



AXH10



AXH16



AXH20

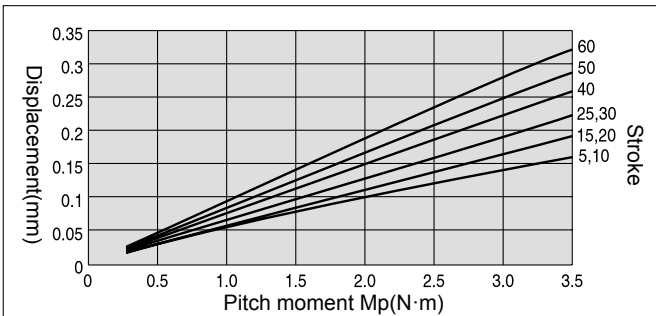
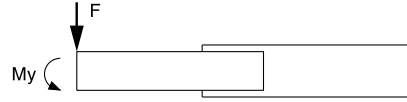
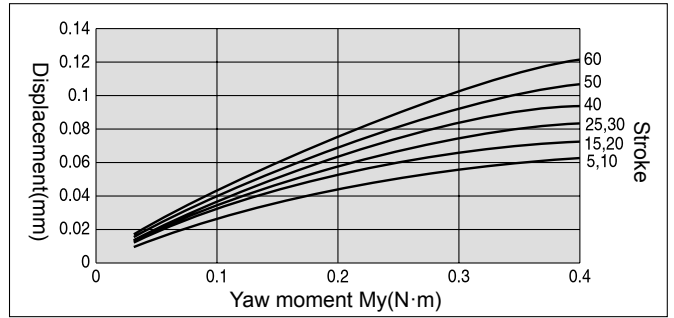


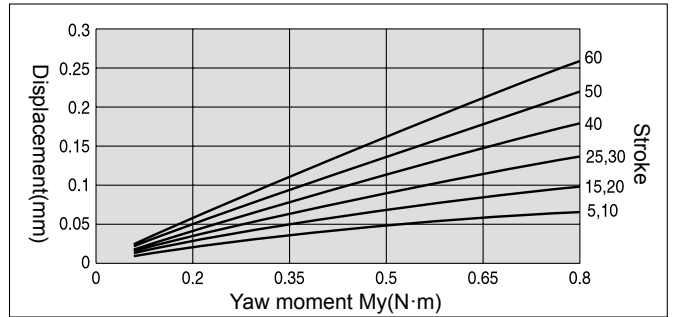
Table Displacement due to Yaw Moment(Reference)



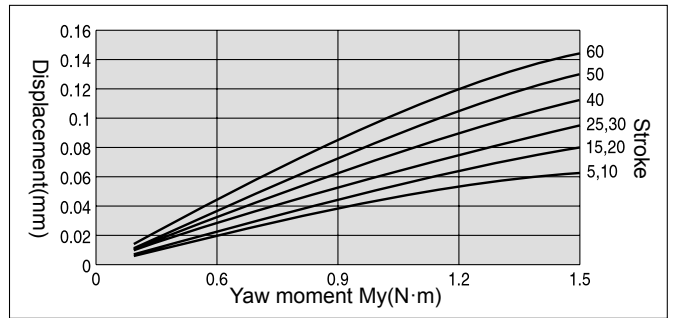
AXH6



AXH10



AXH16



AXH20

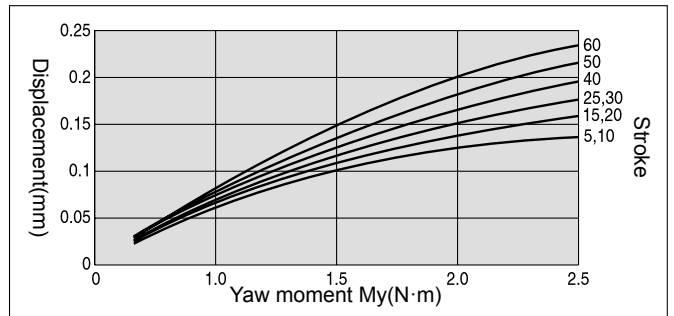
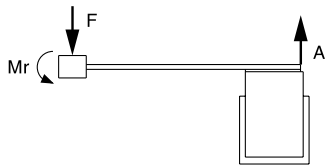
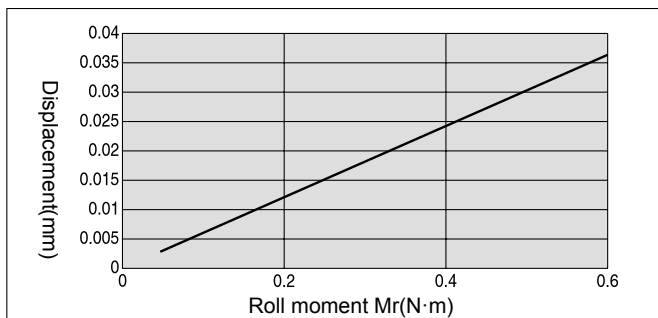


Table Displacement

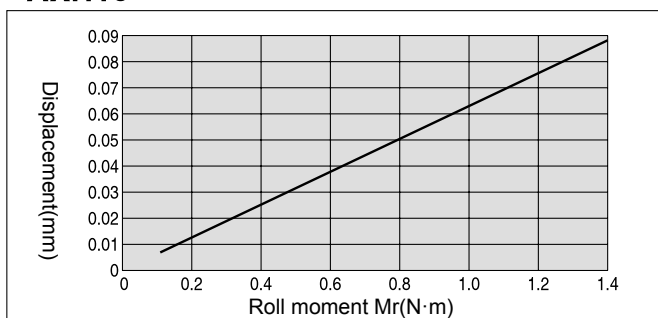
Table Displacement due to Roll Moment(Reference)



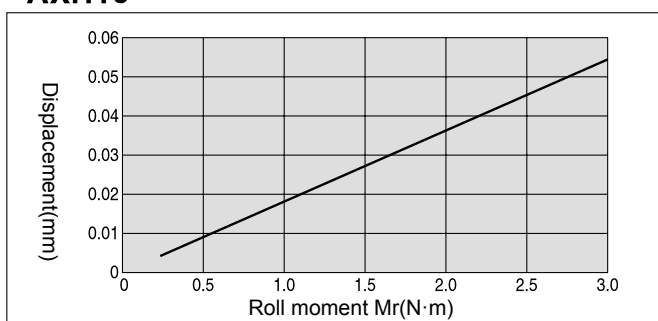
AXH6



AXH10



AXH16



AXH20

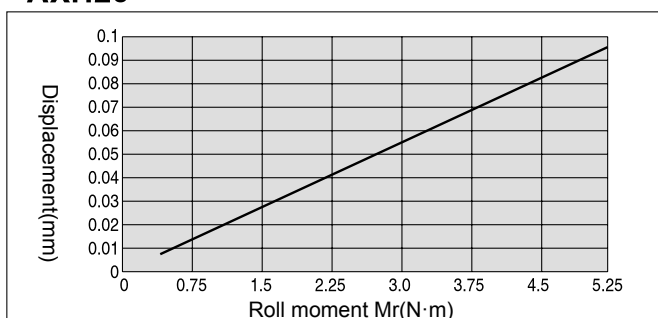
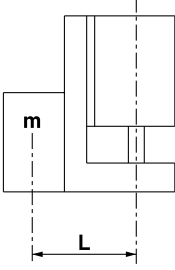
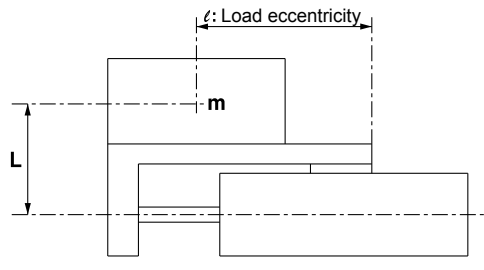


Table Accuracy

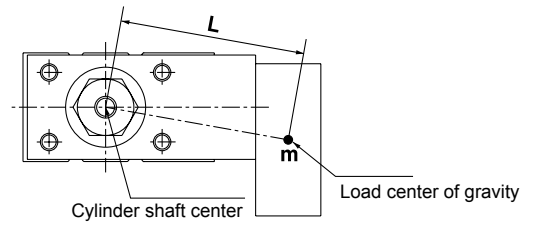
Traveling parallelism	Stroke(mm)	
	5 to 30	40 to 60
	0.05mm	0.1 mm

Model	Allowable moment(N·m)		
	Pitch moment	Yaw moment	Roll moment
	M_p	M_y	M_r
AXH6	0.47	0.39	0.59
AXH10	0.96	0.82	1.37
AXH16	1.88	1.59	2.75
AXH20	3.14	2.75	5.49

Selection Conditions: Follow the tables below in order to determine selection conditions and choose one selection graph.

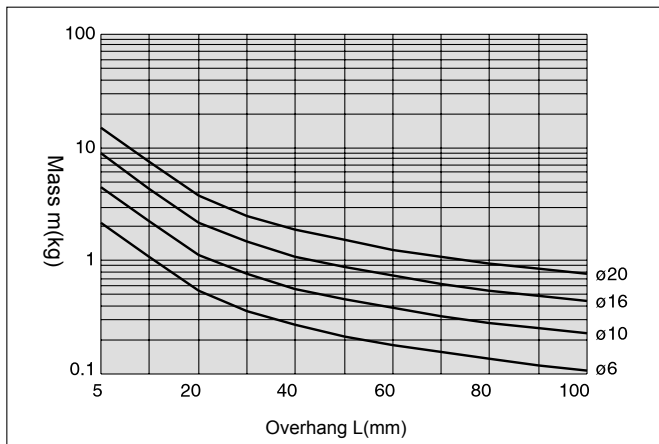
Mounting orientation	Horizontal											
												
Max. speed(mm/s)	Up to 100	Up to 300	Up to 500	Up to 100			Up to 300			Up to 500		
Load eccentricity (εmm)	—			50	100	200	50	100	200	50	100	200
Selection graph	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

*L: Overhang (the distance from the cylinder shaft center to the load center of gravity).
The direction of L can also be a diagonal direction. (Refer to the drawing at right.)

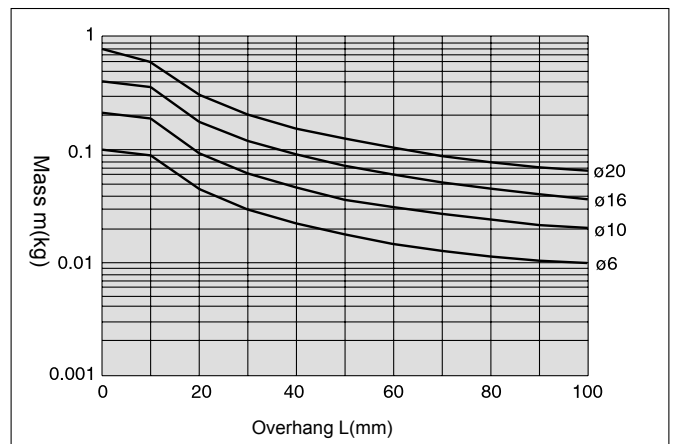


Selection Graph (1) to (3) (Vertical Mounting)

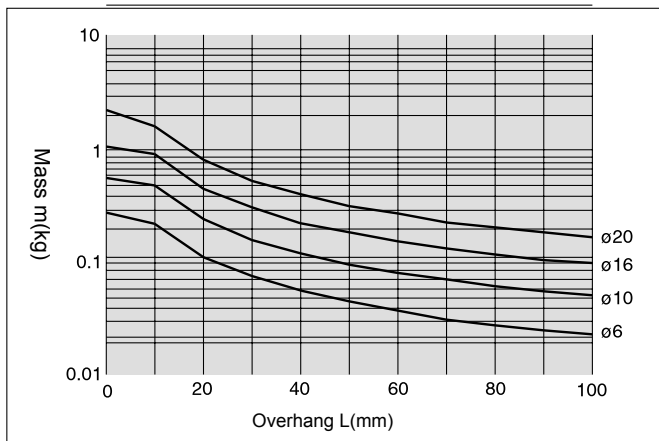
Graph (1) Max. Speed 100mm/s or Less



Graph (1) Max. Speed 100mm/s or Less



Graph (2) Max. Speed 300mm/s or Less

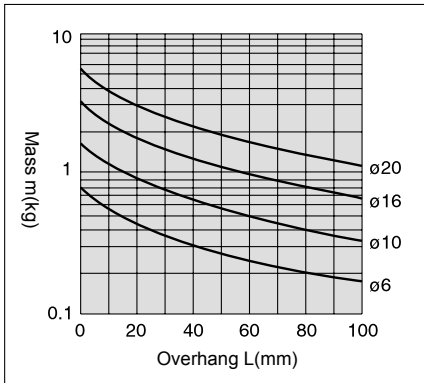


Selection Graph (4) to (12) (Horizontal Mounting)

Graph (4) Load Eccentricity 50mm

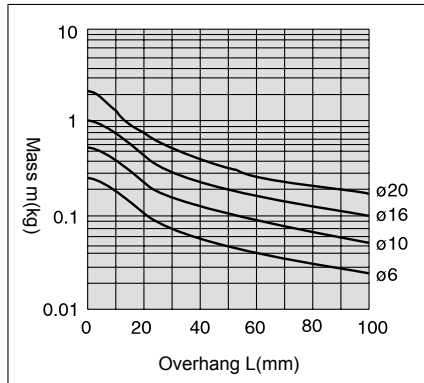
Max. Speed 100mm/s or less

Graph (4) Load Eccentricity 50mm



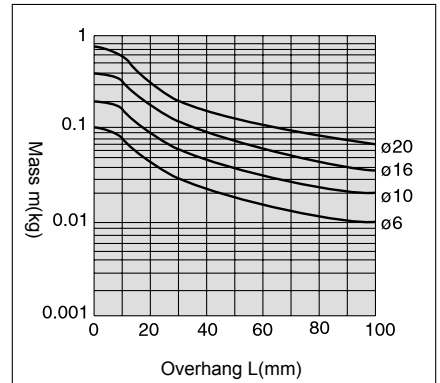
Max. Speed 300mm/s or less

Graph (7) Load Eccentricity 50mm

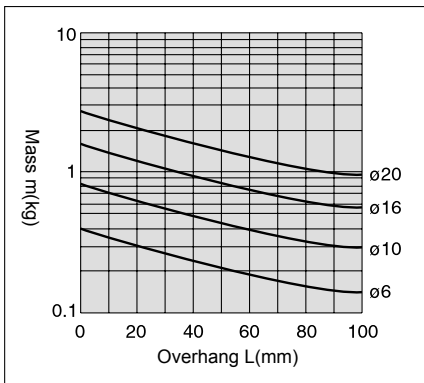


Max. Speed 500mm/s or less

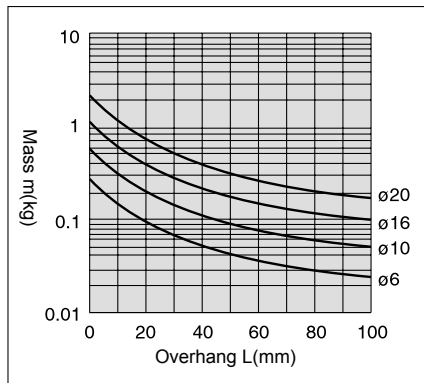
Graph (10) Load Eccentricity 50mm



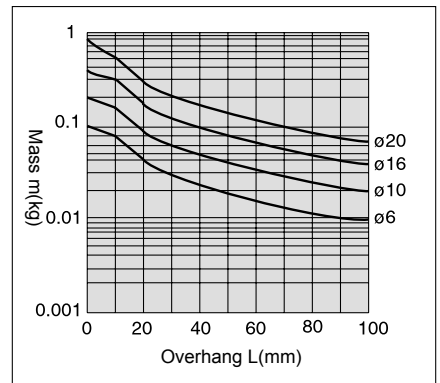
Graph (5) Load Eccentricity 100mm



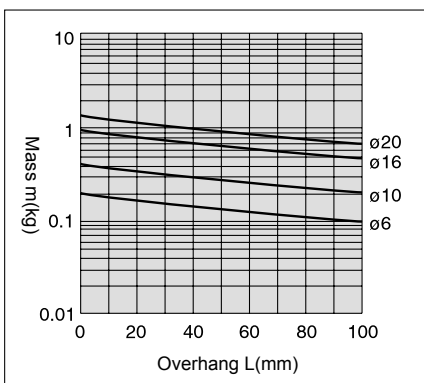
Graph (8) Load Eccentricity 100mm



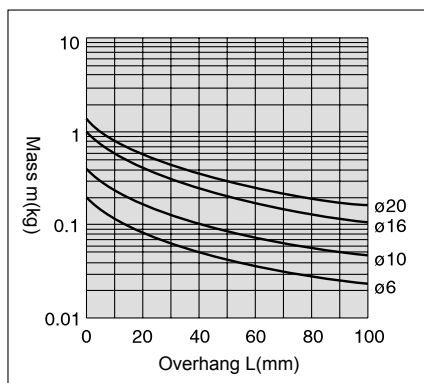
Graph (11) Load Eccentricity 100mm



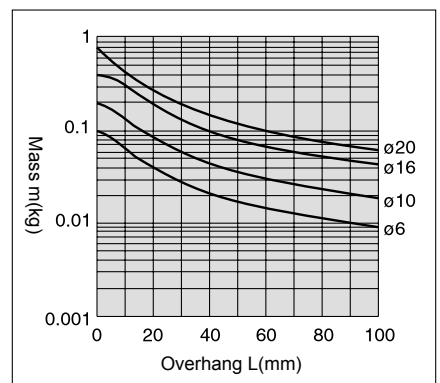
Graph (6) Load Eccentricity 200mm



Graph (9) Load Eccentricity 200mm

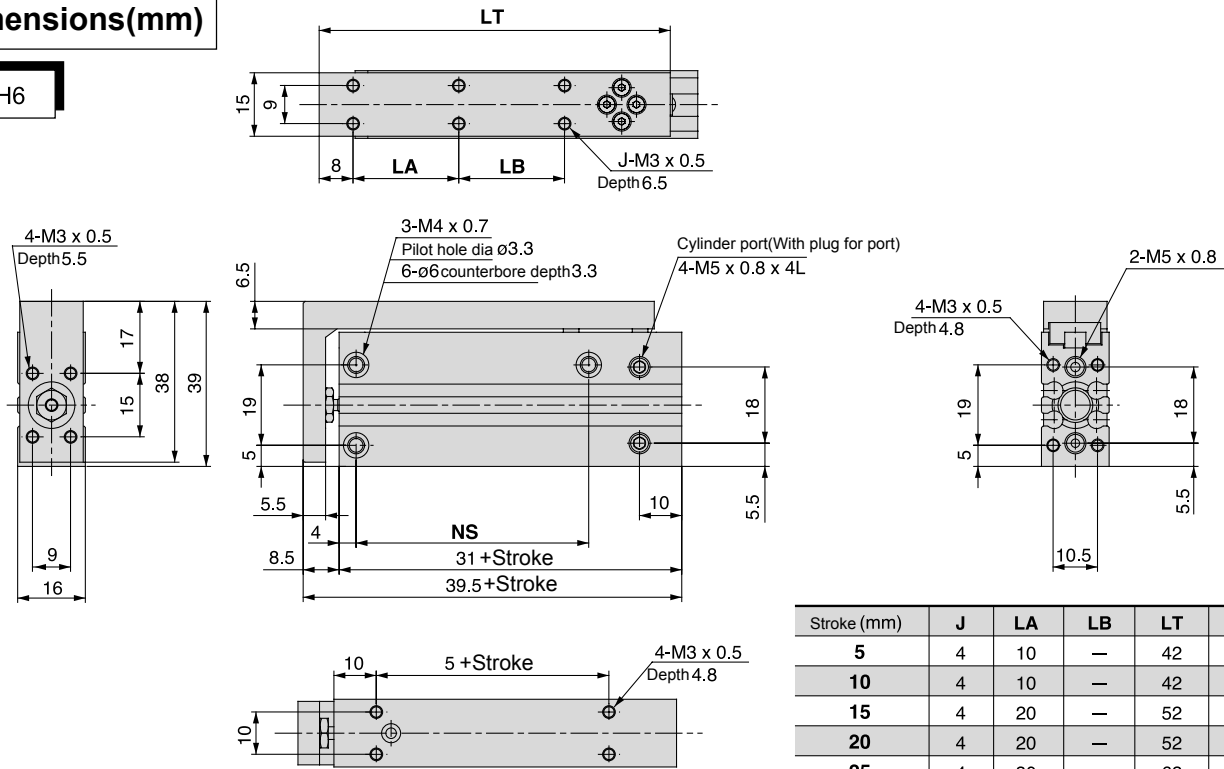


Graph (12) Load Eccentricity 200mm



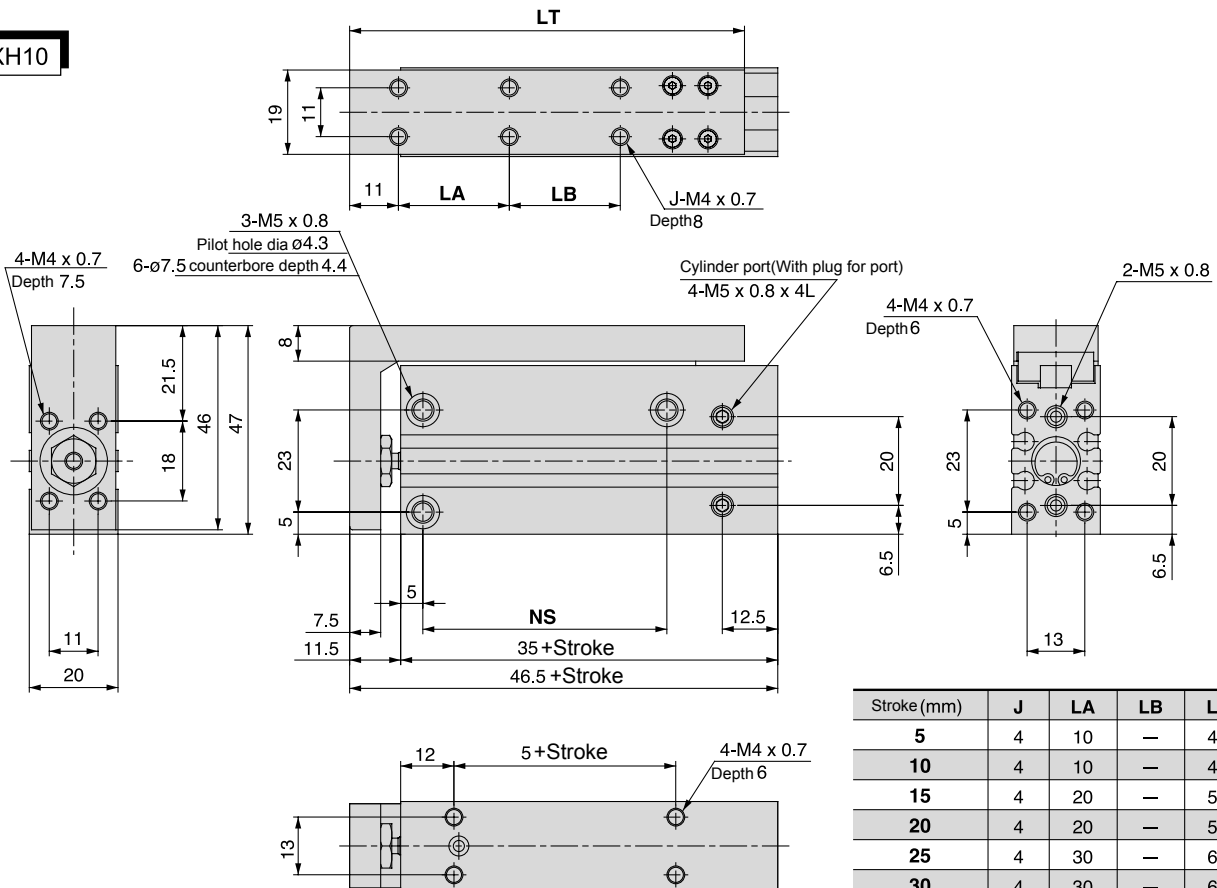
Dimensions(mm)

AXH6



Stroke (mm)	J	LA	LB	LT	NS
5	4	10	—	42	14
10	4	10	—	42	14
15	4	20	—	52	24
20	4	20	—	52	24
25	4	30	—	62	30
30	4	30	—	62	30
40	6	20	20	72	45
50	6	25	25	82	55
60	6	30	30	92	60

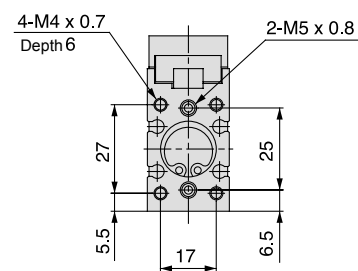
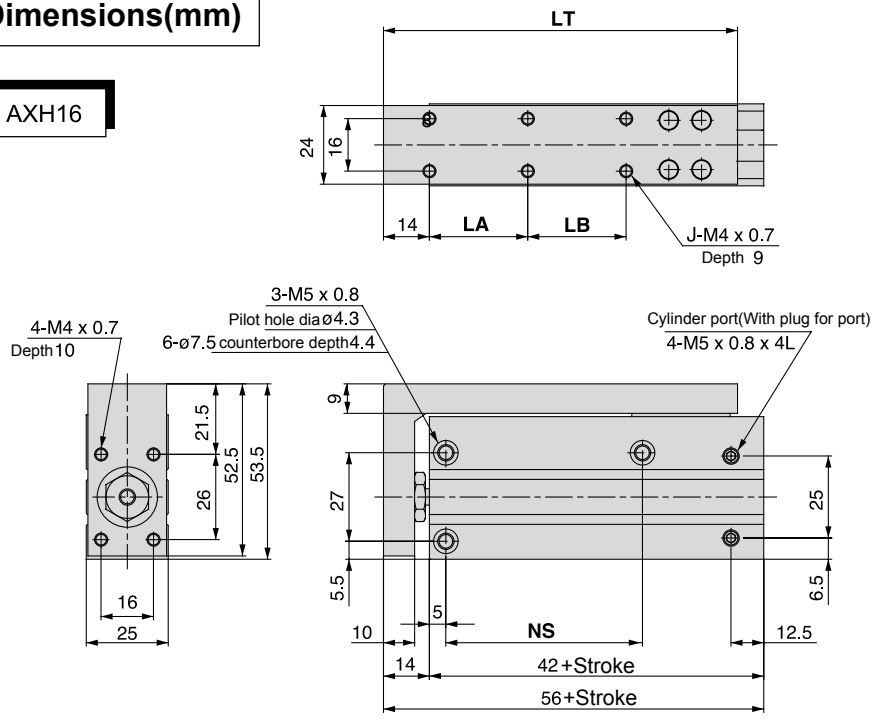
AXH10



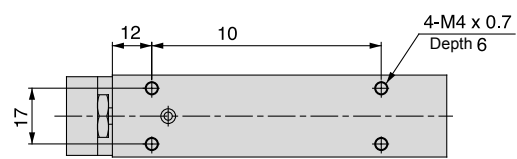
Stroke (mm)	J	LA	LB	LT	NS
5	4	10	—	49	14
10	4	10	—	49	14
15	4	20	—	59	24
20	4	20	—	59	24
25	4	30	—	69	30
30	4	30	—	69	30
40	6	20	20	79	45
50	6	25	25	89	55
60	6	30	30	99	60

Dimensions(mm)

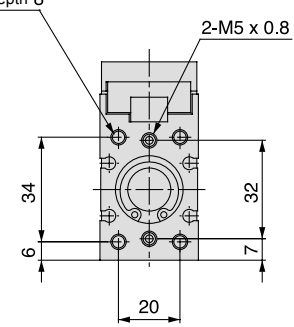
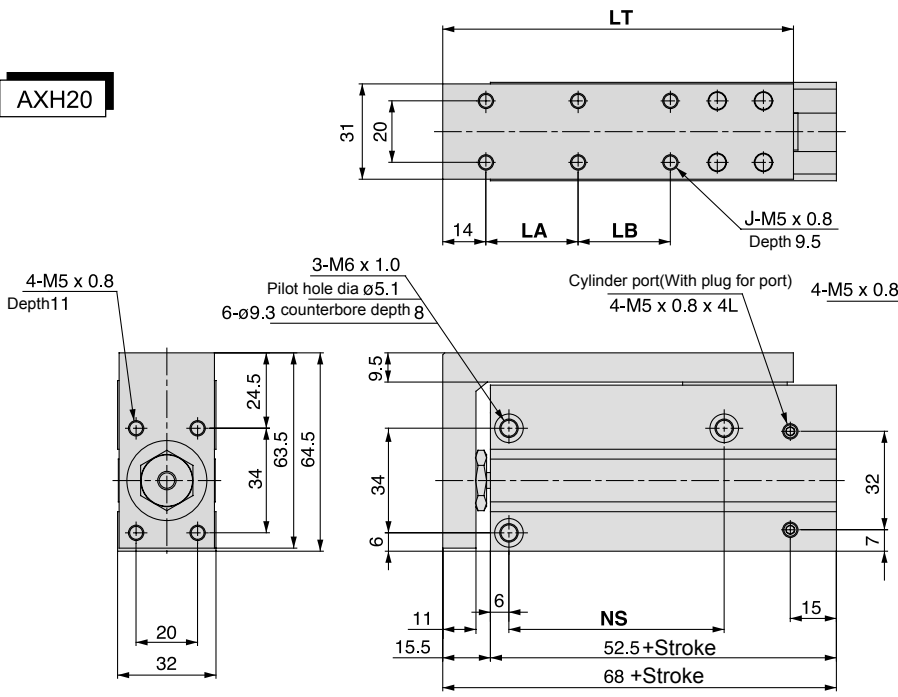
AXH16



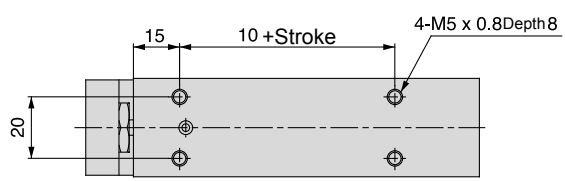
Stroke (mm)	J	LA	LB	LT	NS
5	4	10	—	58	20
10	4	10	—	58	20
15	4	20	—	68	30
20	4	20	—	68	30
25	4	30	—	78	40
30	4	30	—	78	40
40	6	20	20	88	50
50	6	25	25	98	60
60	6	30	30	108	60



AXH20



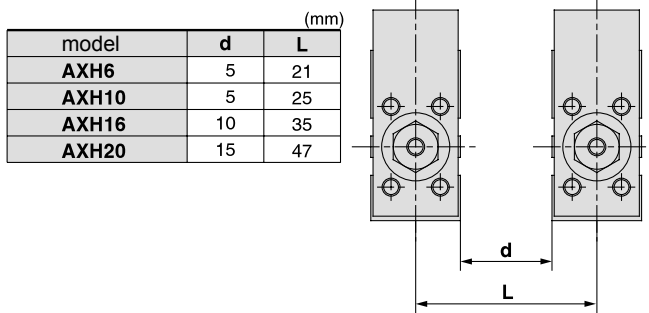
Stroke (mm)	J	LA	LB	LT	NS
5	4	10	—	64	20
10	4	10	—	64	20
15	4	20	—	74	25
20	4	20	—	74	25
25	4	30	—	84	40
30	4	30	—	84	40
40	6	20	20	94	50
50	6	25	25	104	70
60	6	30	30	114	70



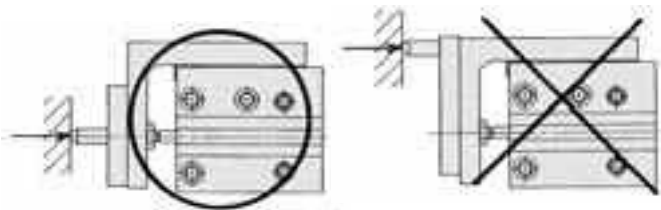
⚠ Caution

Auto Switch Mounting

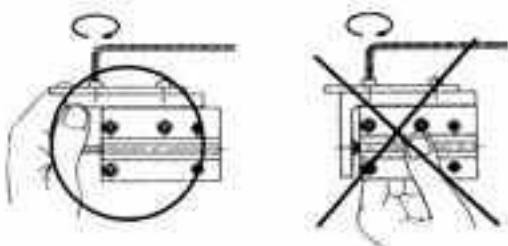
1. When the Compact Slide with the D-A9 or D-M9 auto switch is used, the auto switches could activate unintentionally if the installed distance is less than the dimension shown in below table.



2. In terms of the work load and moment, operate the cylinder below the maximum work load and allowable moment. If the output of the compact slide is applied directly to the table, make sure it is applied along the rod axial line. (Refer to the figure below.)



3. Hold the table when fastening work pieces to it with bolts etc. If the body is held while tightening bolts etc., the guide section will be subjected to a large moment, and there may be a loss of precision.



Operating Precautions

4. Since the connection between the piston rod and table is a floating mechanism, the table has backlash of 0.15mm or less in the stroke direction. (Refer to the figure below.)

