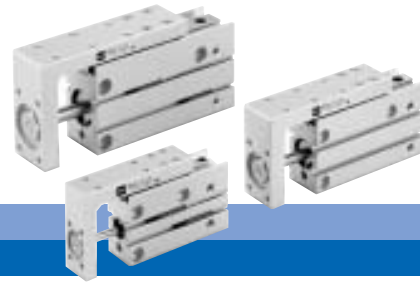


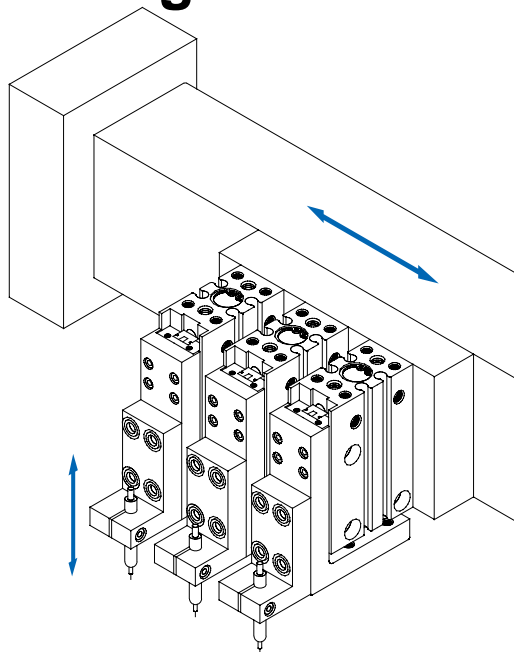
**produces a table cylinder**  
**non-rotating accuracy**



**MXH** /  $\varnothing 6, \varnothing 10, \varnothing 16, \varnothing 20$

**A table cylinder suitable for short pitch mounting**

Application example



**Auto switches offer numerous variations**

Reed switches, solid state switches and 2 color indicator type solid state switches can be mounted

**$\varnothing 20$  bore size is now standard**

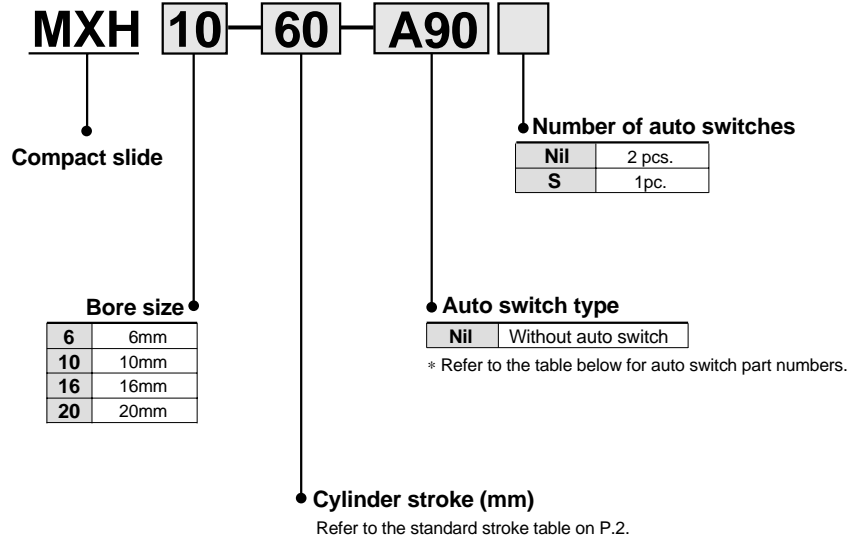
**Series variations**

Model	Bore size (mm)	Standard stroke (mm)								
		5	10	15	20	25	30	40	50	60
MXH6	6	•	•	•	•	•	•	•	•	•
MXH10	10	•	•	•	•	•	•	•	•	•
MXH16	16	•	•	•	•	•	•	•	•	•
MXH20	20	•	•	•	•	•	•	•	•	•

# Series *MXH*

ø6, ø10, ø16, ø20

## How to Order



### Applicable auto switch types

Type	Special function	Electrical entry	Indicator light	Wiring (output)	Load voltage			Auto switch model		Lead wire length (m) *			Applicable load		Detailed specifications
					DC	AC		Electrical entry direction		0.5 (Nil)	3 (L)	5 (Z)			
						5V 12V	100V or less	Vertical	Lateral						
Reed switch	-	Grommet	No	2 wire	24V	5V 12V	100V or less	A90V	A90	●	●	-	IC circuit	Relay PLC	P.14
			Yes					3 wire (NPN equiv.)	-	5V	-	A96V	A96		
Solid state switch	-	Grommet	Yes	3 wire (NPN)	24V	12V	-	F9NV	F9N	●	●	-	-	Relay PLC	P.15
				3 wire (PNP)				F9PV	F9P	●	●	-			
				2 wire				F9BV	F9B	●	●	-			
	Diagnostic indication (2 color indicator)			3 wire (NPN)				F9NWV	F9NW	●	●	○			P.16
				3 wire (PNP)				F9PWV	F9PW	●	●	○			
				2 wire				F9BWV	F9BW	●	●	○			

\* Lead wire length symbol 0.5m ..... Nil (Example) A93  
 3m ..... L (Example) A93L  
 5m ..... Z (Example) F9NWZ

\* Solid state switches marked with a "O" are produced upon receipt of order.

\* Refer to pages 12 through 17 for sections related to auto switches.

# Compact Slide Series *MXH*

## Specifications



1MPa: Approx. 10.2kgf/cm<sup>2</sup>

Bore size (mm)	<b>6</b>	<b>10</b>	<b>16</b>	<b>20</b>
Guide rail width (mm)	5	7	9	12
Fluid	Air			
Action	Double acting type			
Piping port size	M5 x 0.8			
Minimum operating pressure	0.12MPa {1.2kgf/cm <sup>2</sup> }	0.06MPa {0.61kgf/cm <sup>2</sup> }		0.05MPa {0.51kgf/cm <sup>2</sup> }
Maximum operating pressure	0.7MPa{7.1kgf/cm <sup>2</sup> }			
Proof pressure	1.05MPa{10.7kgf/cm <sup>2</sup> }			
Ambient and fluid temperature	Without auto switch: -10 to 70°C (without freezing) With auto switch: -10 to 60°C (without freezing)			
Piston speed	50 to 500mm/s			
Allowable kinetic energy J (kgf·cm)	0.0125(0.127)	0.025(0.25)	0.05(0.5)	0.1(1.0)
Lubrication	Non-lube			
Cushion	Rubber bumpers at both ends			
Stroke length tolerance	+1.0 0			
Auto switches (optional)	Reed switch D-A9□ Solid state switch D-F9□			

## Standard Stroke Table

Bore size (mm)	Standard strokes (mm)
<b>6, 10, 16, 20</b>	5, 10, 15, 20, 25, 30, 40, 50, 60

## Theoretical Output Table

(N)

Bore size (mm)	Rod diameter (mm)	Operating direction	Piston area (mm <sup>2</sup> )	Operating pressure MPa		
				0.3	0.5	0.7
<b>6</b>	3	OUT	28.3	8.49	14.2	19.8
		IN	21.2	6.36	10.6	14.8
<b>10</b>	4	OUT	78.5	23.6	39.3	55.0
		IN	66.0	19.8	33.0	46.2
<b>16</b>	6	OUT	201	60.3	101	141
		IN	172	51.6	86.0	121
<b>20</b>	8	OUT	314	94.2	157	220
		IN	264	79.2	132	185

## Minimum Stroke for Mounting of Auto Switches

(mm)

Number of auto switches mounted	Applicable auto switch models		
	D-A9□ D-A9□V	D-F9□ D-F9□V	D-F9□W D-F9□WV
1pc.	5	5	5
2pcs.	10	5	10

## Weight Table

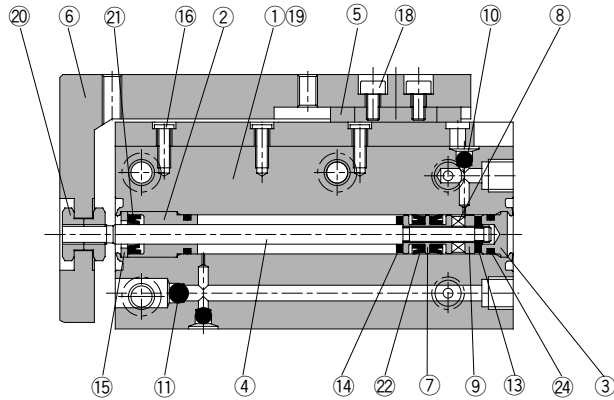
(g)

Model	Stroke (mm)								
	5	10	15	20	25	30	40	50	60
<b>MXH6</b>	62	67	76	81	91	96	111	125	140
<b>MXH10</b>	117	125	140	148	162	170	192	215	238
<b>MXH16</b>	216	227	247	258	279	290	323	353	386
<b>MXH20</b>	437	455	486	505	542	560	597	656	700

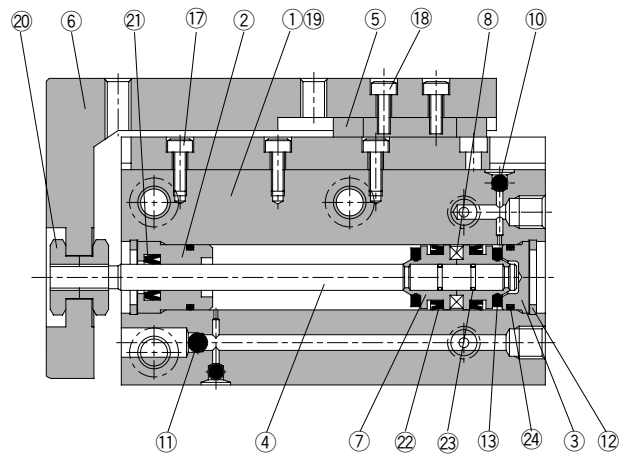
# Series MXH

## Construction

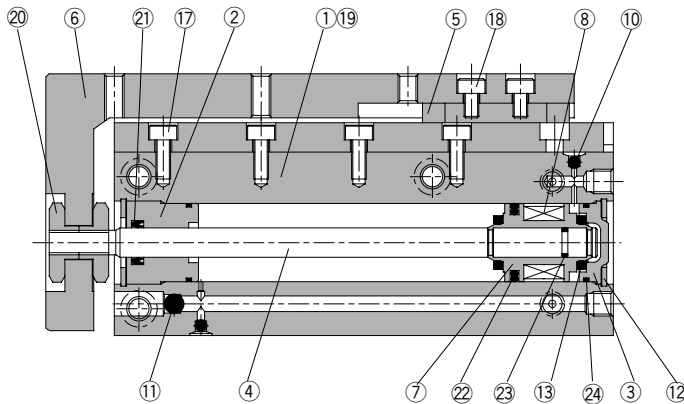
### MXH6 (ø6)



### MXH10 (ø10)



### MXH16, 20 (ø16, ø20)



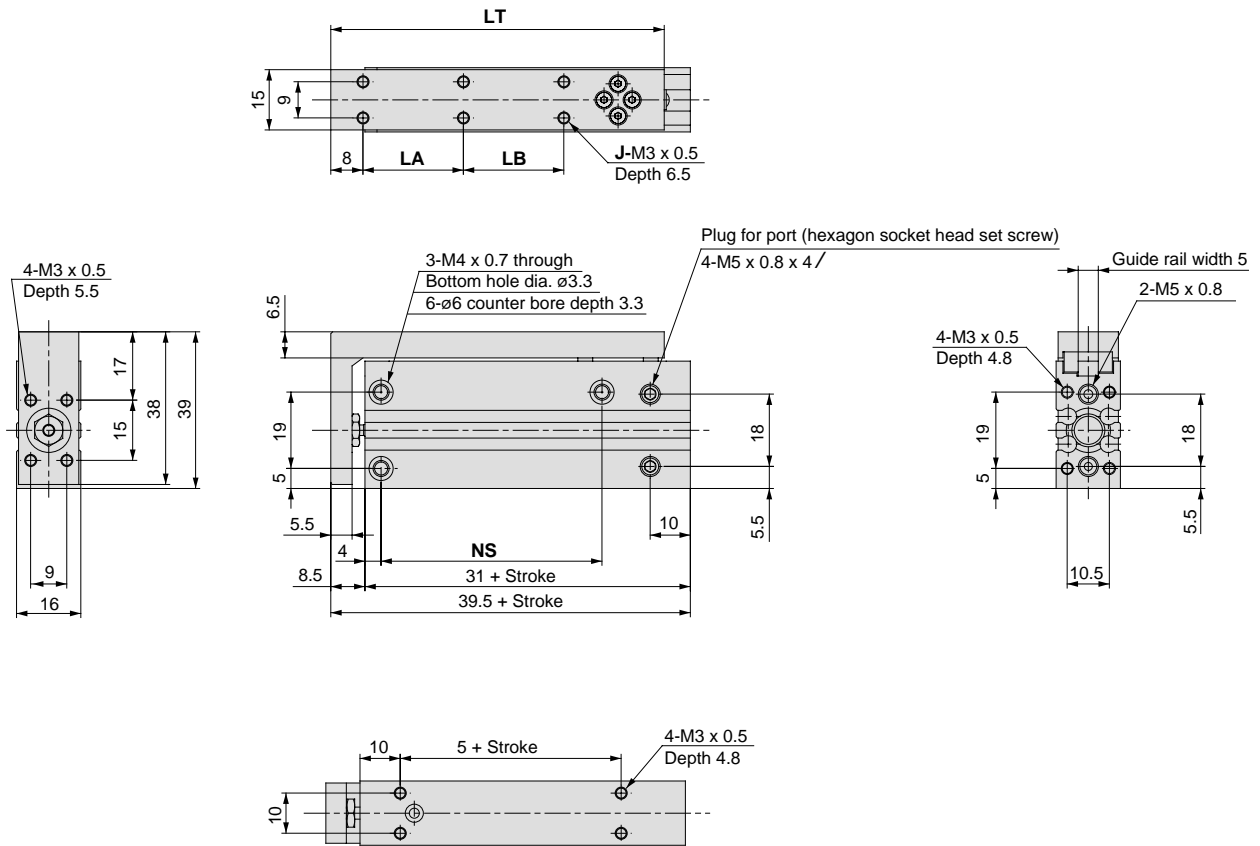
#### Parts list

No.	Description	Material	Note
1	Cylinder tube	Aluminum alloy	Hard anodized
2	Rod cover	Brass	
3	Head cover	Brass	ø6, ø10 electroless nickel plated
		Aluminum alloy	ø16, ø20 white chromated
4	Piston rod	Stainless steel	
5	Linear guide	—	
6	Table	Aluminum alloy	Hard anodized
7	Piston	Brass	ø6, ø10
		Aluminum alloy	ø16, ø20
8	Magnet	Magnet material	ø6, ø10 nickel plated
		Synthetic rubber	ø16, ø20
9	Magnet holder	Brass	ø6
10	Steel ball A	High carbon chrome bearing steel	
11	Steel ball B	High carbon chrome bearing steel	

#### Parts list

No.	Description	Material	Note
12	C type snap ring for hole	Carbon tool steel	ø10, ø16, ø20
13	Bumper	Urethane	
14	Bumper	Urethane	
15	Seal retainer	Stainless steel	ø6
16	Round head Phillips screw	Carbon steel	ø6 black zinc chromated
17	Hexagon socket head cap screw	Chrome molybdenum steel	ø10, ø16, ø20 nickel plated
18	Hexagon socket head cap screw	Chrome molybdenum steel	Nickel plated
19	Hexagon socket head plug	Chrome molybdenum steel	Nickel plated
20	Nut	Brass	Nickel plated
21	Rod seal	NBR	
22	Piston seal	NBR	
23	Piston gasket	NBR	ø10, ø16, ø20
24	Gasket	NBR	

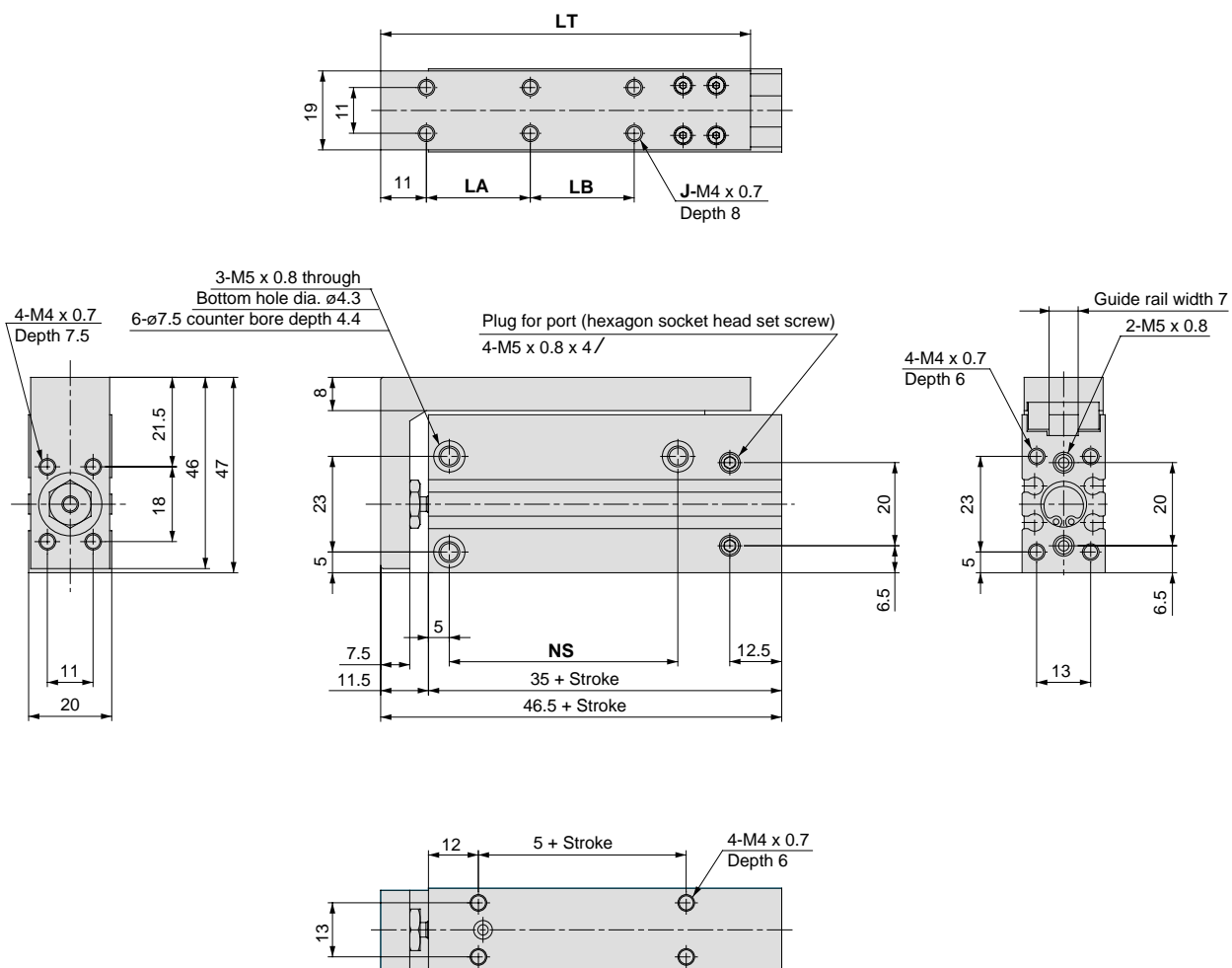
## Dimensions/ $\phi 6$



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

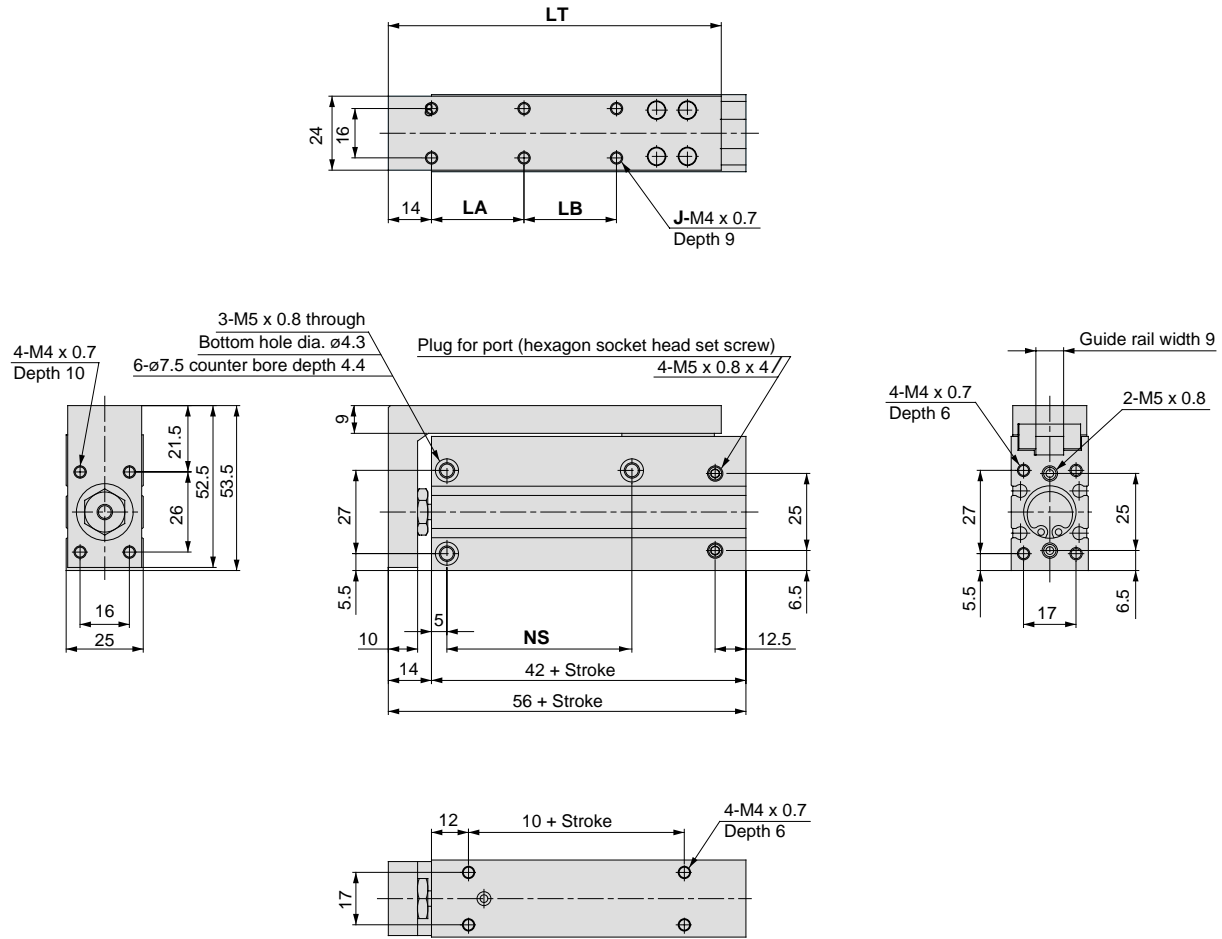
# Series MXH

## Dimensions/ $\phi 10$



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

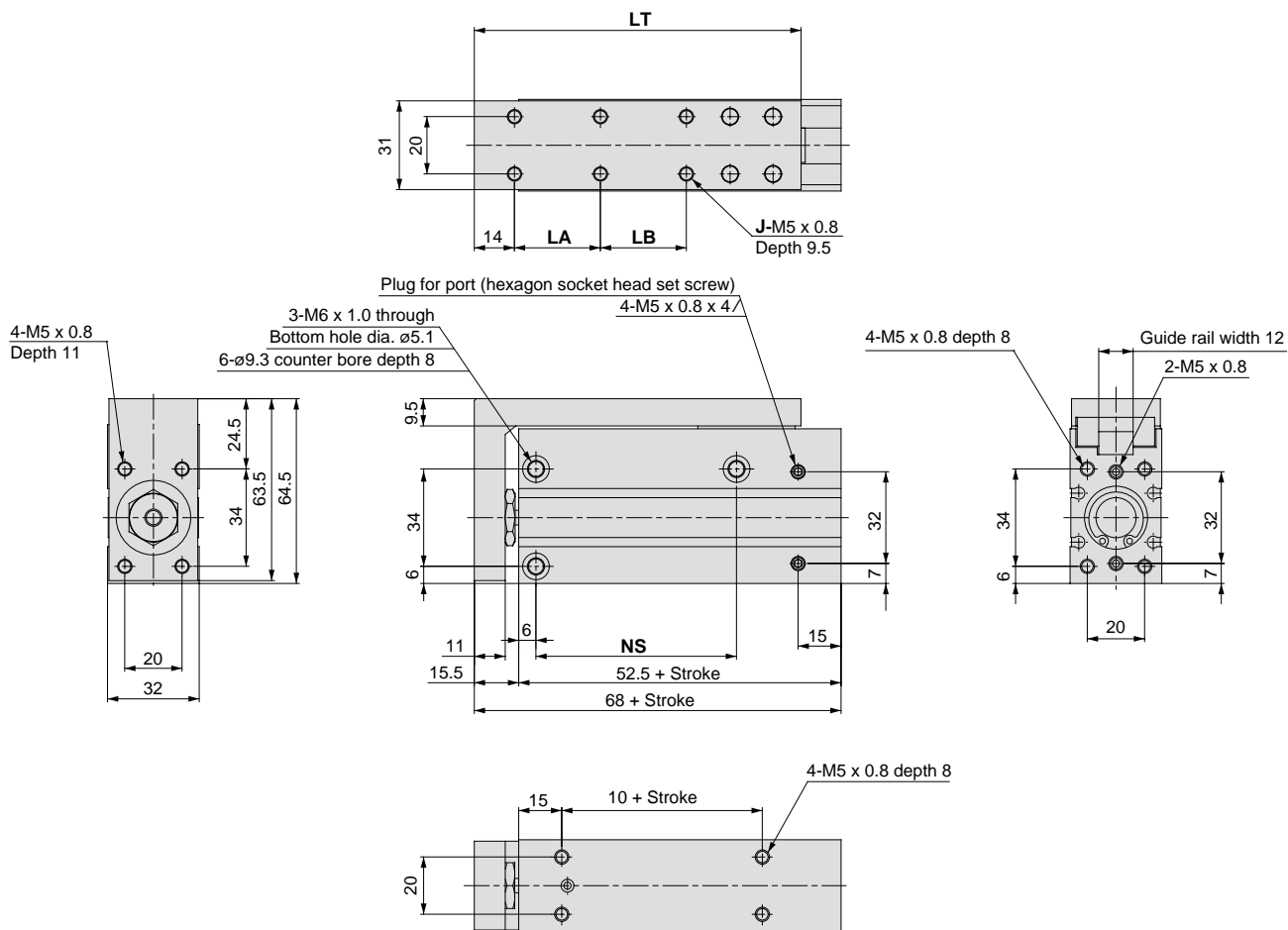
## Dimensions/Ø16



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

# Series MXH

## Dimensions/ $\phi 20$



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