

MCSF series

LOW PROFILE SLIDE CYLINDER

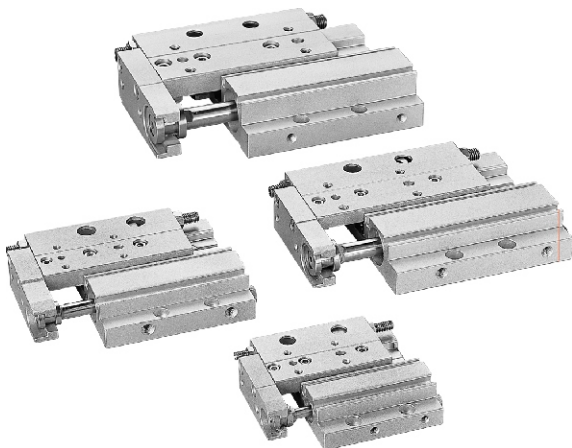


Table for standard stroke:

Tube I.D.	Stroke (mm)
φ 8	10, 20, 30
φ 12	20, 30, 50
φ 16	30, 50, 75
φ 20	30, 50, 75, 100

※ Produce after received your orders.

Order example:

MCSF-12-50-X11

MODEL

TUBE I.D.

STROKE

STROKE ADJUSTER

Blank: 5mm

X11: 15mm

X12: 25mm

※ X12 (adjustable range 25mm) is not available in series MCSF-8 / MCSF-12

Cylinder weight:

(unit: g)

Stroke (mm)	Tube I.D.			
	φ 8	φ 12	φ 16	φ 20
10	125	—	—	—
20	132	212	—	—
30	171	248	372	608
50	—	357	522	775
75	—	—	696	1053
100	—	—	—	1351

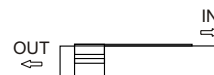
Features:

- Parallel mounting of guide to cylinder gives slim compact unit.
- Flush fitting sensor groove.
- Magnetic as standard.

Specification:

Model	MCSF	
Acting type	Double acting	
Tube I.D. (mm)	8	12, 16, 20
Port size	M3 × 0.5	M5 × 0.8
Medium	Air	
Operating pressure range	1.5~7 kgf/cm ²	
Proof pressure	10 kgf/cm ²	
Ambient temperature	- 10~ + 60℃ (No freezing)	
Operating speed range	50~500 mm/s	
Lubricator	Not required	
Cushion	Rubber bumper	
Stroke length tolerance	+1.0 0	
Stroke adjuster range	Extend 5mm / Retract 5mm	
Sensor switch	RCE, RCE1	

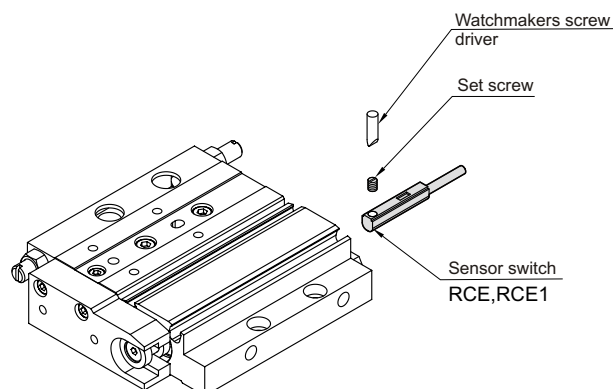
Theoretical force:



(Unit: N)

Tube I.D. (mm)	Piston rod (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)						
				0.2	0.3	0.4	0.5	0.6	0.7	
8	4	OUT	50	10	15	20	25	30	35	
		IN	38	8	11	15	19	23	27	
12	6	OUT	113	23	34	45	57	68	79	
		IN	85	17	26	34	43	51	60	
16	8	OUT	201	40	60	80	101	121	141	
		IN	151	30	45	60	76	91	106	
20	10	OUT	314	63	94	126	157	188	220	
		IN	236	47	71	94	118	142	165	

Installation of sensor switch:

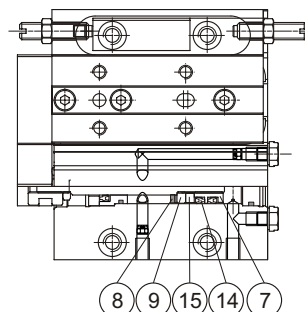


MCSF Inside structure & Parts list $\phi 8 \sim \phi 20$

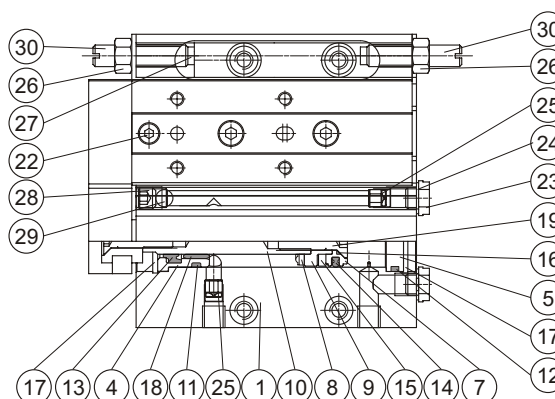
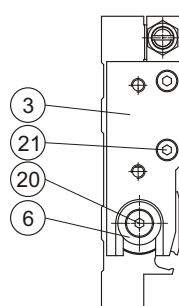
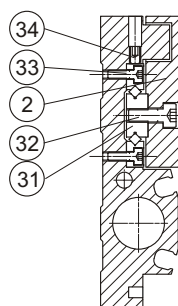
LOW PROFILE SLIDE CYLINDER



$\phi 8$



$\phi 12, \phi 16, \phi 20$



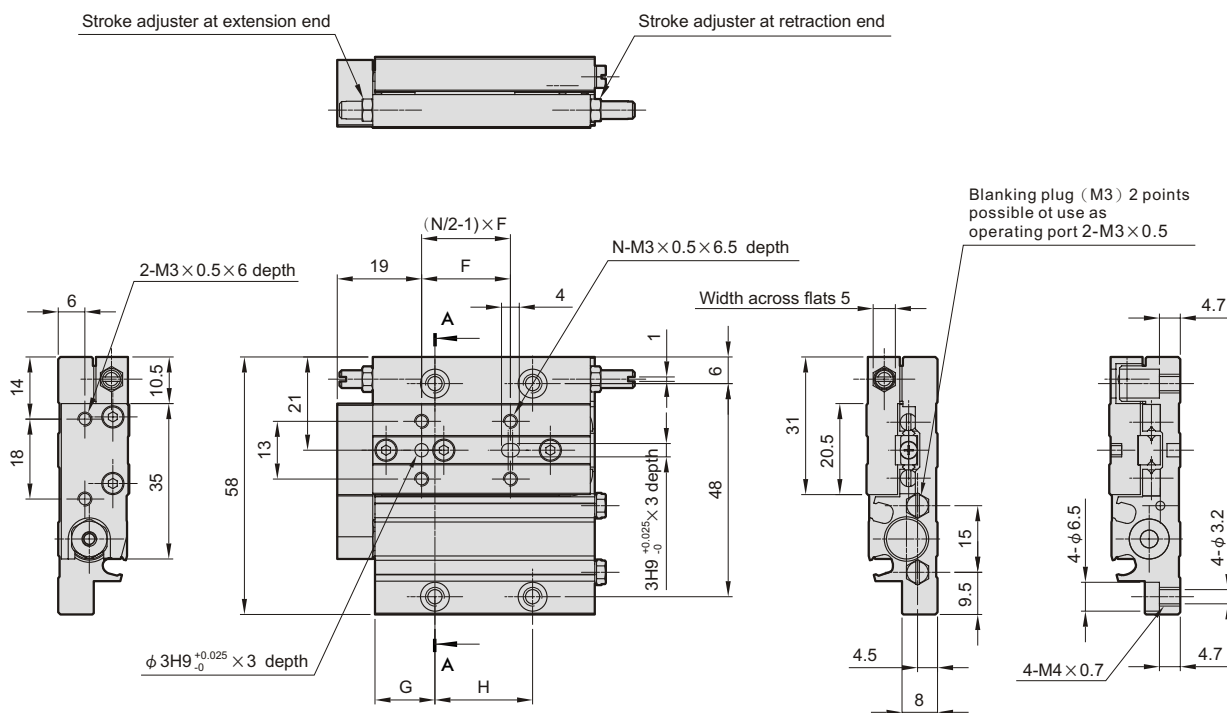
Material

No.	Part name	Tube I.D.	8	12~20
1	Body		Aluminum alloy	
2	Table		Aluminum alloy	
3	Plate		Aluminum alloy	
4	Rod cover		Aluminum alloy	
5	Head cover		Aluminum alloy	
6	Floating connector		Stainless steel	
7	Piston		Stainless steel	Aluminum alloy
8	Cushion pad		NBR	
9	Piston		Stainless steel	Aluminum alloy
10	Piston rod		Stainless steel	
11	Cover ring		NBR	
12	Cover ring		NBR	
13	Rod packing		NBR	
14	Piston packing		NBR	
15	Magnet ring		Magnet material	
16	Gasket		NBR	
17	Stop ring		Stainless steel	

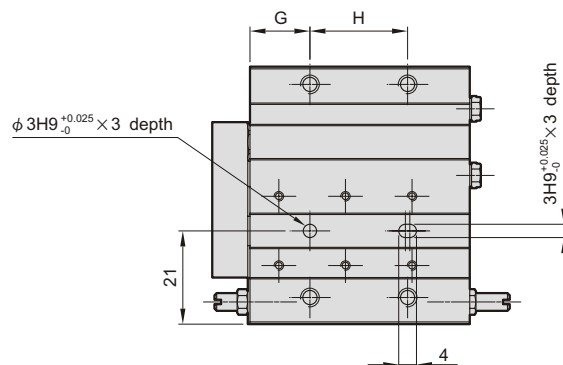
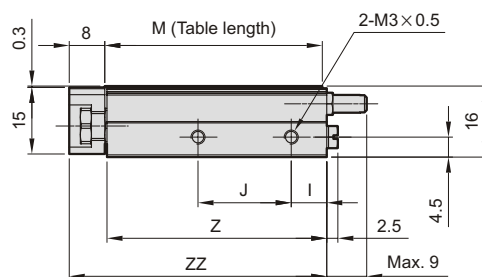
No.	Part name	Tube I.D.	8	12~20
18	Rod bush		—	Copper
19	Piston bolt		—	Stainless steel
20	Floating connector bolt		—	Stainless steel
21	Bolt		Stainless steel	
22	Bolt		Stainless steel	
23	Plug		Copper	
24	Plug gasket		POM	
25	Orifice		Stainless steel	
26	Nut		Copper/Stainless steel	
27	End cushion		PU	
28	Plug		—	Stainless steel
29	Ball		—	Stainless steel
30	Adjuster bolt		Copper/Stainless steel	
31	Slide way		Bearing steel	
32	Bolt		Stainless steel	
33	Bolt		Stainless steel	
34	Bolt		Stainless steel	

MCSF Dimensions $\phi 8$

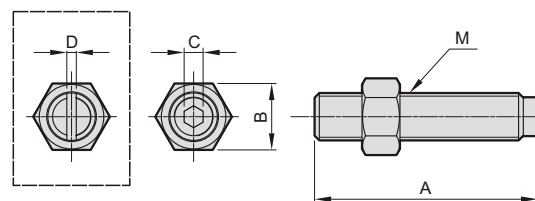
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A-A



Stroke adjuster bolt $\phi 8 \sim \phi 20$

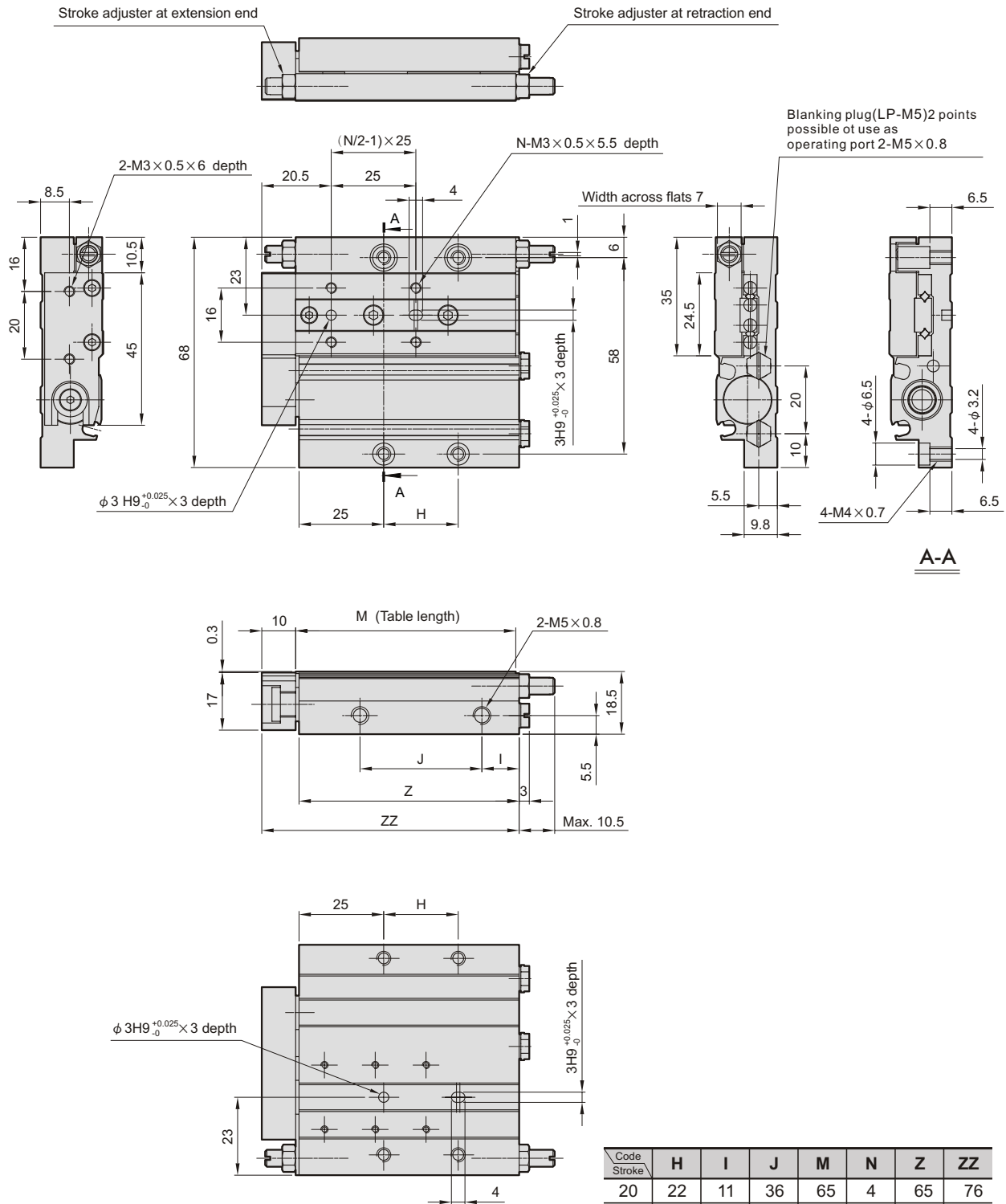


Code Stroke	F	G	H	I	J	M	N	Z	ZZ
10	20	13.5	22	8	21	49	4	49.5	58
20	26	14.5	26	6.5	28	54	4	54.5	63
30	26	14.5	40	8	41	69	6	69.5	78

Tube I.D.	Order code	Adjustable stroke range (mm)	A	B	C	D	M
8	MCSF-8	5	17	5	—	1	M4 $\times$ 0.7
	MCSF-8-X11	15	27				
12	MCSF-12	5	23.5	7	—	1	M5 $\times$ 0.8
	MCSF-12-X11	15	33.5				
16	MCSF-16	5	26.5	8	3	—	M6 $\times$ 1
	MCSF-16-X11	15	36.5				
	MCSF-16-X12	25	46.5		—	1	
20	MCSF-20	5	30	11	4	—	M8 $\times$ 1
	MCSF-20-X11	15	40				
	MCSF-20-X12	25	50		—	1.5	

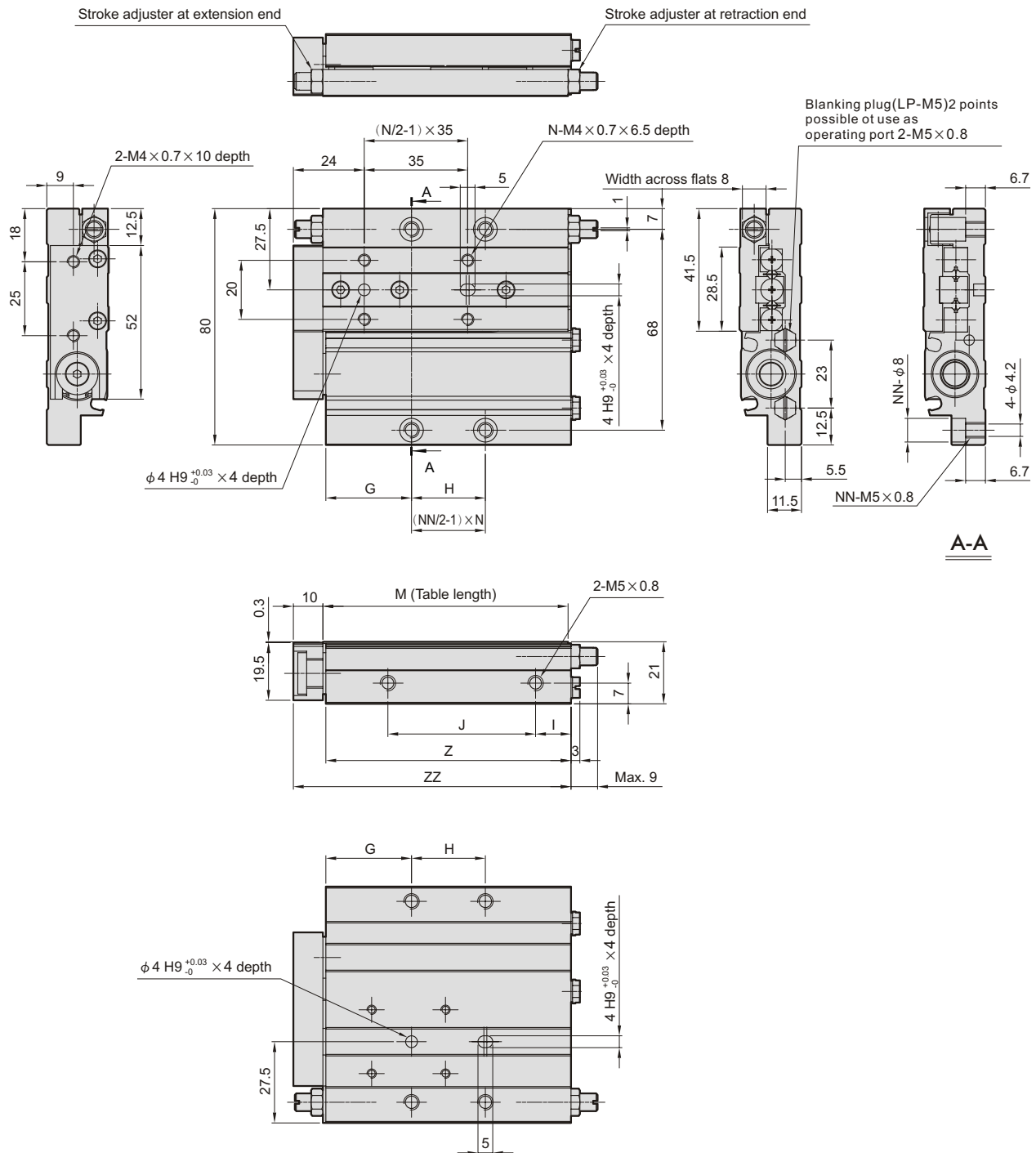
MCSF Dimensions $\phi 12$

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MCSF Dimensions $\phi 16$

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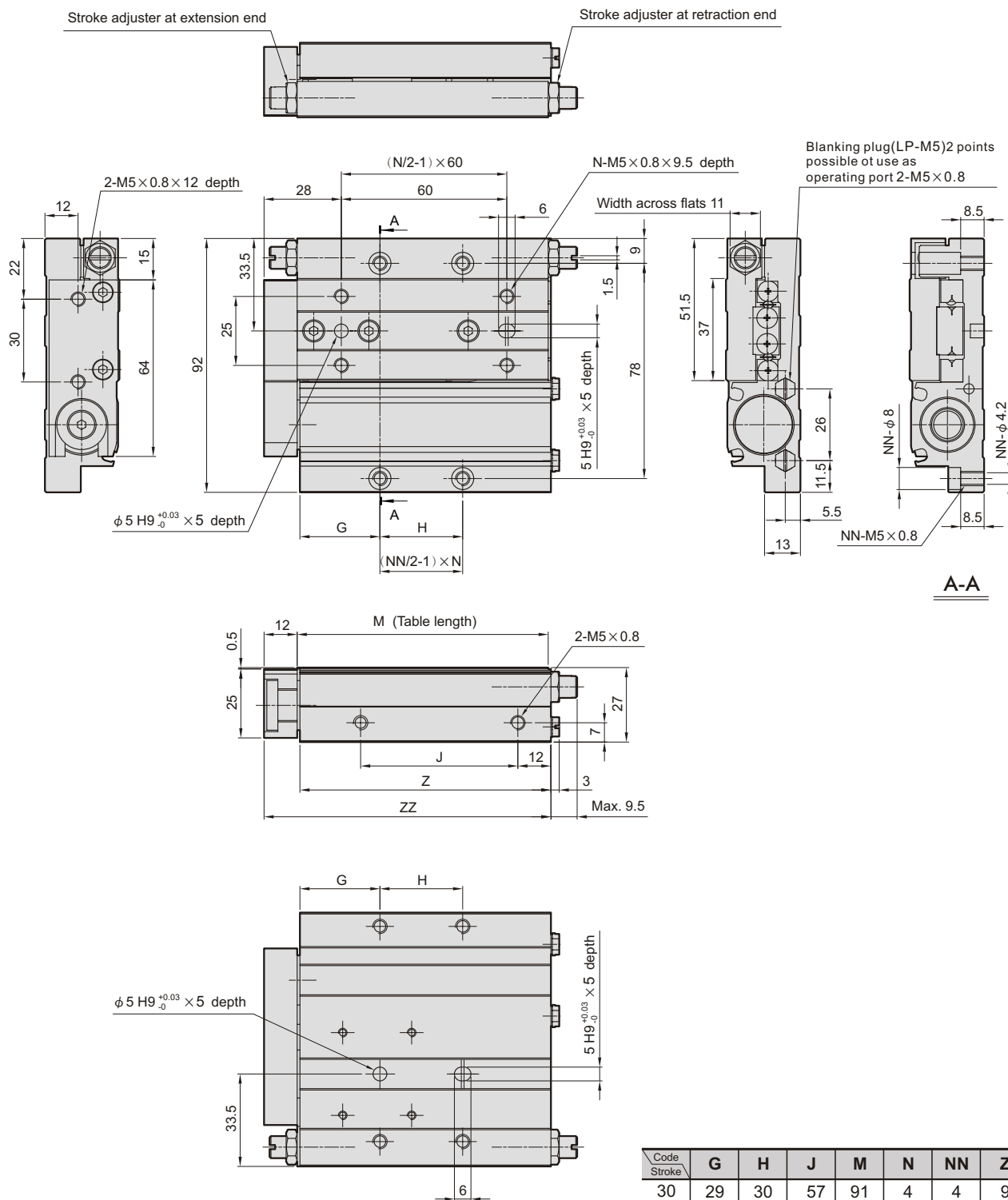
Code Stroke	G	H	J	M	N	NN	Z	ZZ
30	29	25	50	83	4	4	83	94
50	29	55	80	113	6	4	113	124
75	39	45	125	159	6	6	159	170

MCSF Dimensions $\phi 20$

LOW PROFILE SLIDE CYLINDER



mindman



Code Stroke	G	H	J	M	N	NN	Z	ZZ
30	29	30	57	91	4	4	91	104
50	36	45	77	113	4	4	113	126
75	40	45	125	162	6	6	162	175
100	59	60	175	211	6	6	211	224