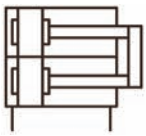
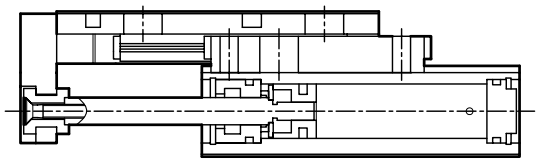
Luft, tryck och rörelse
-Kvalité för automatisering

Kompaktslid
Serie - MDX

KOMPAKTSLID
Serie MDX



■Internal structure



■Cylinder thrust

Bore size mm	Piston rod mm	Action	Piston area	Air pressure (kgf/cm²)						
				1	2	3	4	5	6	7
8	5	Push	1.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
		Pull	0.7	0.7	1.4	2.1	2.8	3.5	4.2	4.9
12	6	Push	2.2	2.2	4.4	6.6	8.8	11	13.2	15.4
		Pull	1.7	1.7	3.4	5.1	6.8	8.5	10.2	11.9
16	8	Push	4.0	4.0	8.0	12	16	20	24	28
		Pull	3.0	3.0	6.0	9.0	12	15	18	21
20	10	Push	6.2	6.2	12.4	18.6	24.8	31	37.2	43.4
		Pull	4.7	4.7	9.4	14.1	18.8	23.5	28.2	32.9
25	12	Push	9.8	9.8	19.6	29.4	39.2	49	58.8	68.6
		Pull	7.5	7.5	15	22.5	30	37.5	45	52.5

Note: The above data are for reference only. When come to actual practice, frictional force and the mechanical effeciency have to be taken into consideration.

■Specification

Item \ Bore size (mm)	ø8	ø12	ø16	ø20	ø25
Operation	Double acting				
Fluid	Air				
Pressure range Kgf/cm² (Kpa)	1~8.5(100~850)				
Max.service pressure Kgf/cm² (Kpa)	9.5(950)				
Range of service temperature ℃	0~60				
Range of speed mm/sec	500~700				
Connection port	M5×0.8			Rc 1/8	
Magnet	With magnetic				

■Cylinder bore size and stroke

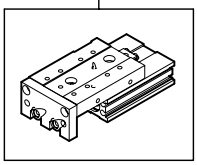
Unit: mm

Bore size (mm)	Standard stroke
8	10、20、30
12	10、20、30、40、50、75
16	10、20、30、40、50、75、100
20	10、20、30、40、50、75、100
25	10、20、30、40、50、75、100

■How to order

MDX × 12 × 50 — SD 2 — B.M 2

Model



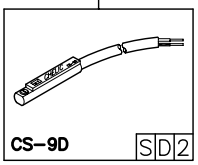
Bore size

8 – ø8 mm
12 – ø12 mm
16 – ø16 mm
20 – ø20 mm
25 – ø25 mm

Stroke

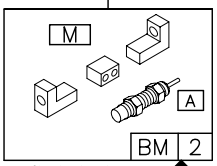
ø8 – 10~30 mm
ø12 – 10~75 mm
ø16 – 10~100 mm
ø20 – 10~100 mm
ø25 – 10~100 mm

Sensor



No code: Without sensor
SD : Sensor code(CS-9D)
SB : Sensor code(CS-9B)
2 : Number of sensor
1 : pc Sensor
2 : pcs Sensors

Shock absorber



A : Shock absorber
B : Adjustable tacking bolt
M : Shock absorber mounting sets
1-1 set
2-2 sets
(Option)

● How to select shock abosrbers.

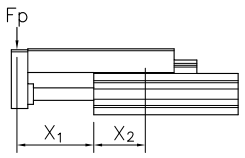
Bore size	Shock absorber	Max.absorb function
8	SAC-0806	0.2 Kgf.m
12	SAC-0806	0.2 Kgf.m
16	SAC-1008	0.4 Kgf.m
20	SAC-1412	1.5 Kgf.m
25	SAC-1412	1.5 Kgf.m

Remark: Shock absorber is mounted on the side of body so as to absorb the impact force. (Please indicate AM□ Code number.)

[M] As the absorbers are fixed assembly which includes middle impact block and adjusting screw fixed seat on each right and left side.(When you purchase, the fix seat assembly is whole set.)

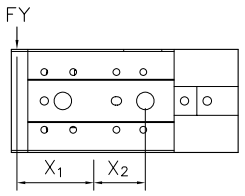
■ The calculation method of the allowed motionless load.

- Vertical moment of force



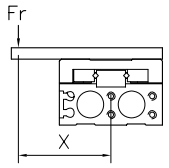
$$FP = \frac{Mp \times 1000}{(X_1 + X_2)}$$

- Leaning sway moment of force



$$FY = \frac{My \times 1000}{(X_1 + X_2)}$$

- Roll moment force



$$Fr = \frac{Mr \times 1000}{X}$$

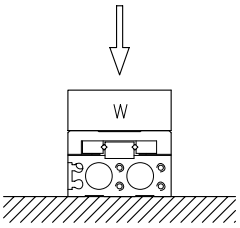
■ Motionless allowable torque

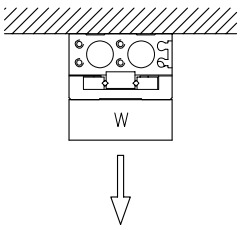
N·m

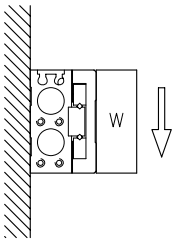
Bore size	Stroke (mm)						
	10	20	30	40	50	75	100
ø8	2.0	2.0	2.8	–	–	–	–
ø12	4.2	4.2	4.2	5.8	7.0	10.0	–
ø16	11.3	11.3	11.3	11.3	15.9	25.0	34.1
ø20	19.4	19.4	19.4	19.4	27.2	35	50.5
ø25	30.6	30.6	30.6	30.6	42.8	55.1	67.3

Note:
- Please do not exceed load limit. It will effect the precision of the precise slide rail, if it exceeds the limit.
- Avoid hitting with great force.
- Inertial load must be with in 1/10 of the allowable motionless load.

Explanation:
- X1 is the distance from body to point of load.
- X2 is the center distance from body to slide.
- X3 is the center distance from (F1) point of load to slide rail holder.







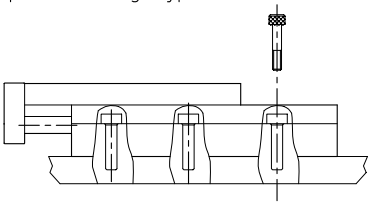
■ Max. allowable load weight

Kg

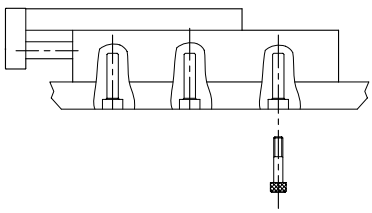
Bore size	Max. allowable load weight
ø8	1
ø12	2
ø16	4
ø20	6
ø25	9

■ Mounting type

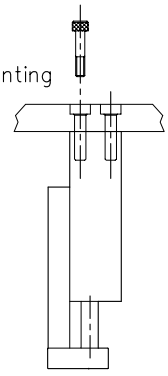
- Top mounting type



- Base mounting

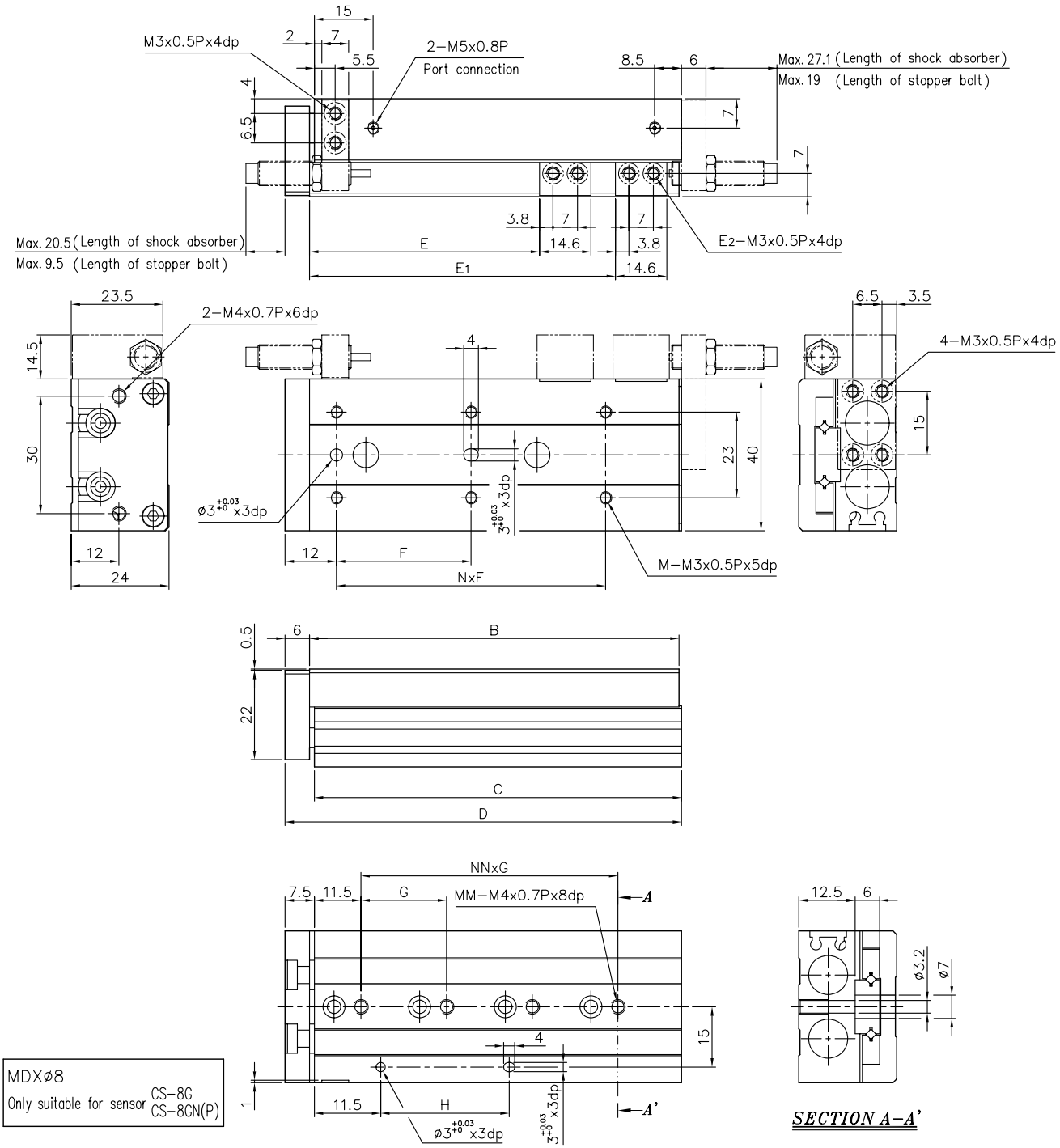


- End vertical mounting



■MDX ø8X ▭

COMPACT disc MDX 8 x ▭ ST



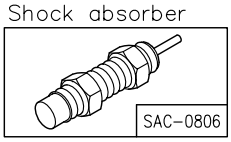
MDXø8
Only suitable for sensor CS-8G CS-8GN(P)

■ Dimensions

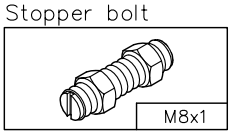
Code / Stroke mm	B	C	D	E	E1	E2	F	N	G	NN	H	M	MM
10	49	48.5	56	23.5	—	2	25	1	28	1	20	4	2
20	54	53.5	61	33.5	—	2	25	1	30	1	30	4	2
30	65	64.5	72	43.5	—	2	40	1	20	2	20	4	3

■ Option

Shock absorber

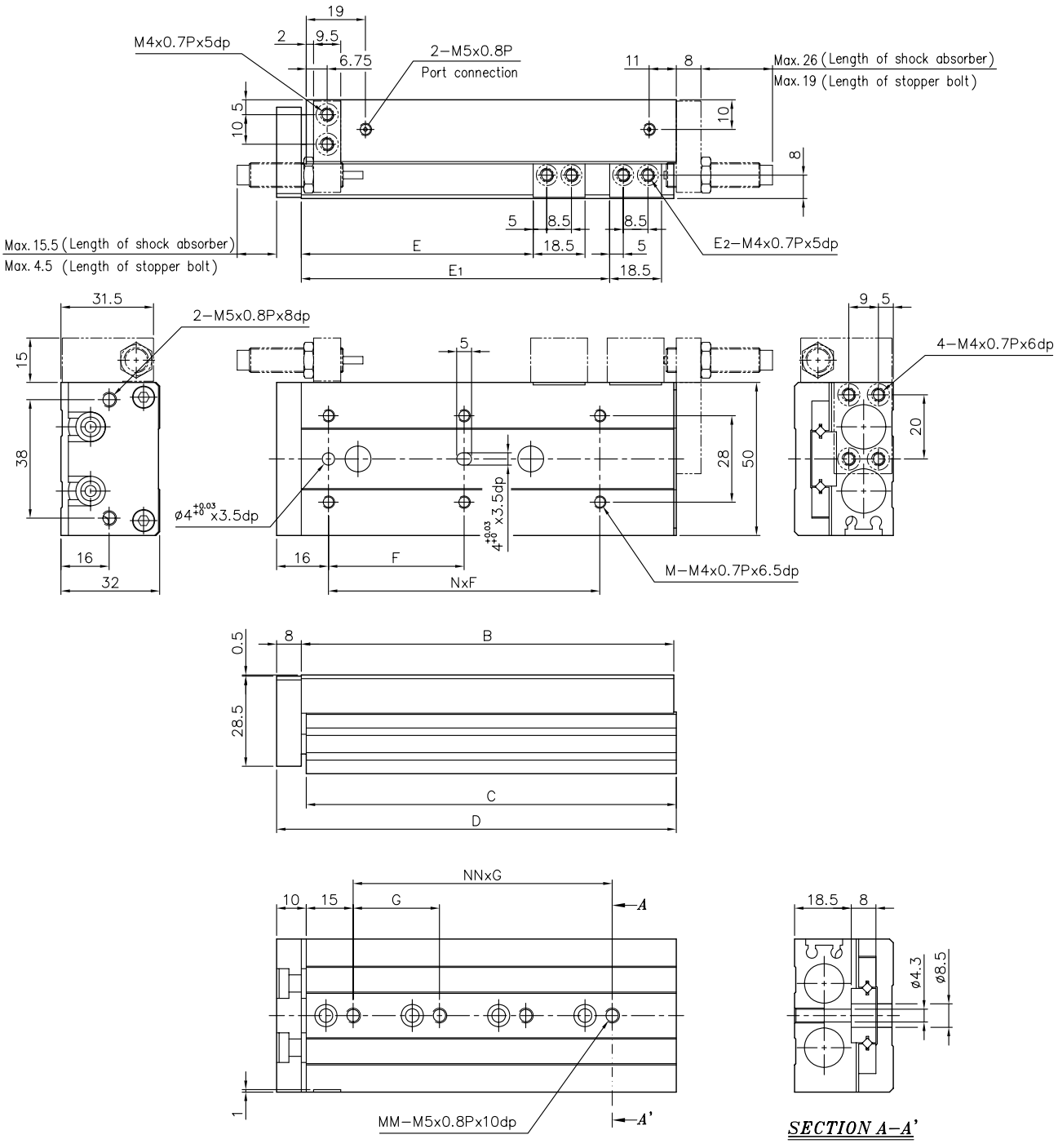


Stopper bolt



■MDX ø12X□

MDX 12x□ST

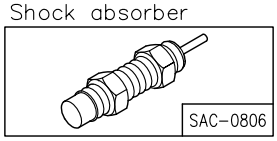


■ Dimensions

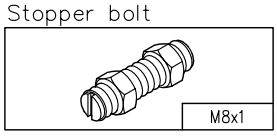
Code / Stroke mm	B	C	D	E	E1	E2	F	N	G	NN	M	MM
10	71	70	80	26.5	—	2	35	1	40	1	4	2
20	71	70	80	36.5	—	2	35	1	40	1	4	2
30	71	70	80	46.5	—	2	35	1	40	1	4	2
40	83	82	92	56.5	—	2	50	1	25	2	4	3
50	103	102	112	66.5	—	2	35	2	36	2	6	3
75	149	148	158	91.5	125.5	4	55	2	36	3	6	4

■ Option

Shock absorber

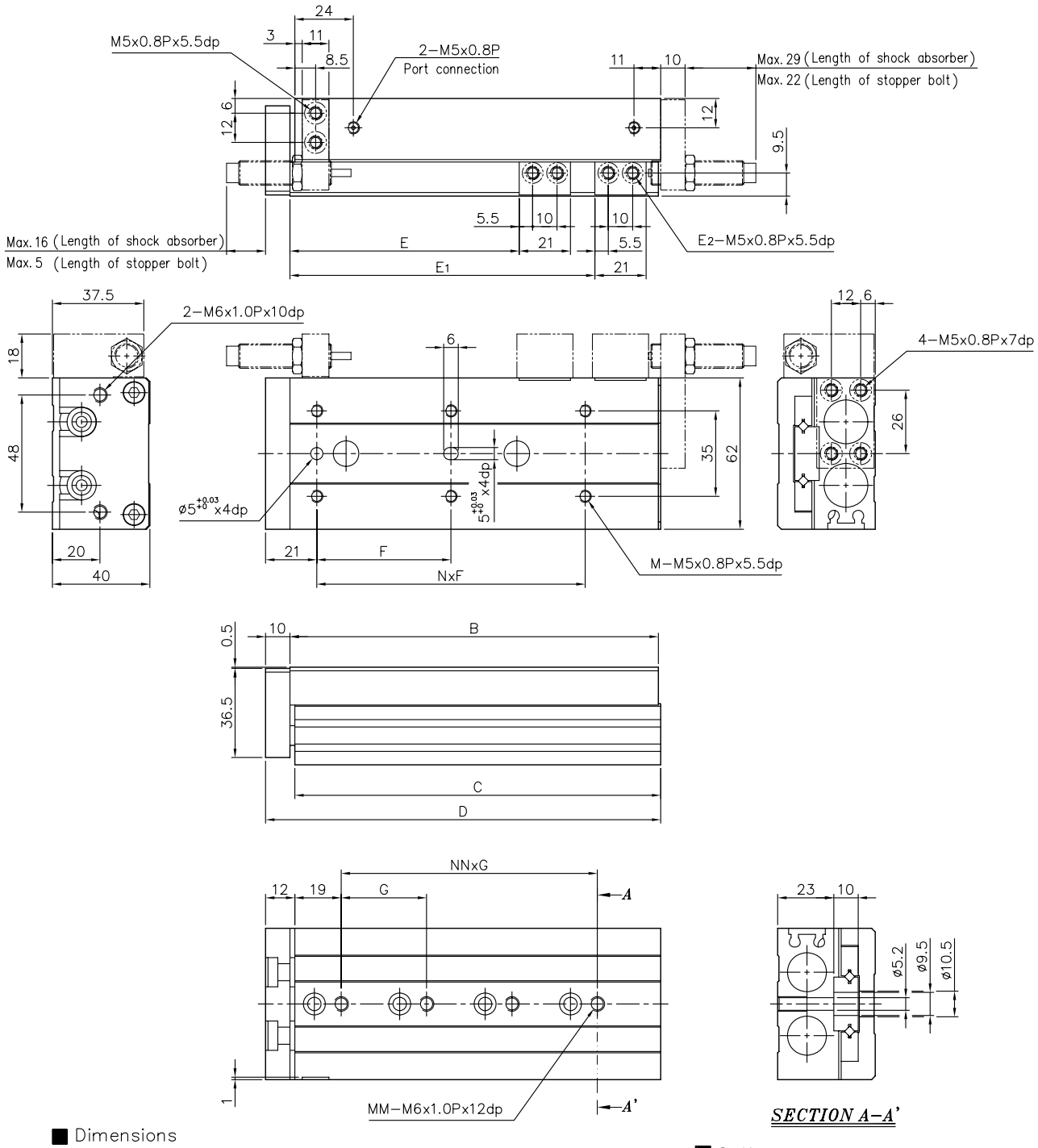


Stopper bolt



■MDX ø16X□

MDX 16x□ST

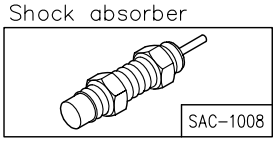


■ Dimensions

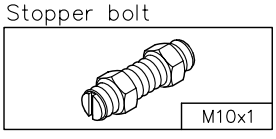
Code / Stroke mm	B	C	D	E	E1	E2	F	N	G	NN	M	MM
10	76	75	87	29	—	2	35	1	40	1	4	2
20	76	75	87	39	—	2	35	1	40	1	4	2
30	76	75	87	49	—	2	35	1	40	1	4	2
40	86	85	97	59	—	2	40	1	50	1	4	2
50	101	100	112	69	—	2	30	2	30	2	6	3
75	151	150	162	94	125	4	55	2	35	3	6	4
100	199	198	210	119	173	4	65	2	35	4	6	5

■ Option

Shock absorber

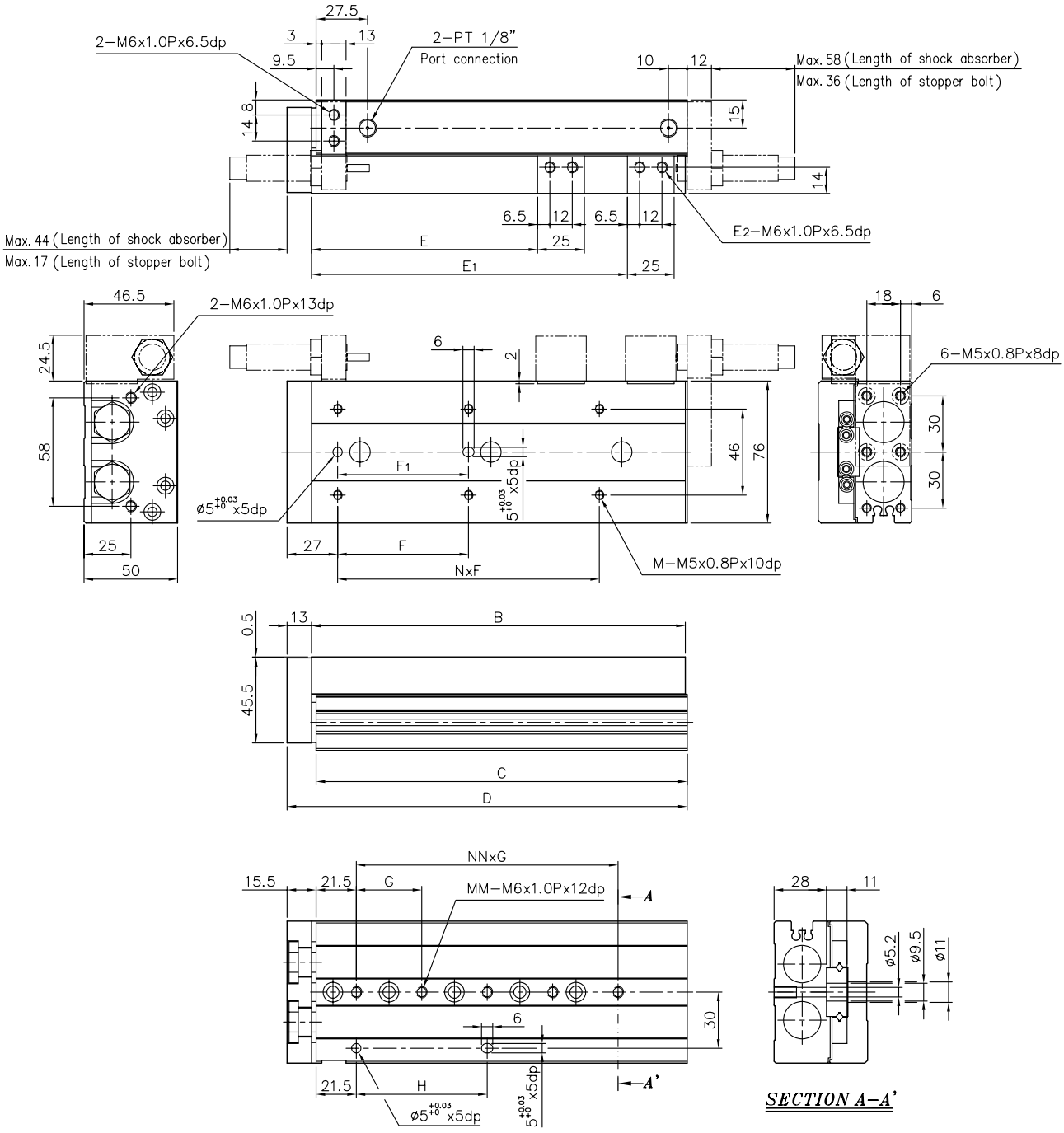


Stopper bolt



■MDX ø20X□

MDX 20x□ST



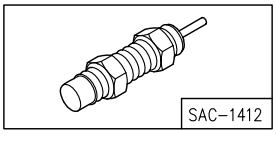
SECTION A–A'

■ Dimensions

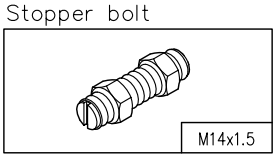
Stroke mm \ Code	B	C	D	E	E1	E2	F	N	F1	G	NN	H	M	MM
10	83	81.5	97	31	—	2	50	1	40	45	1	35	4	2
20	83	81.5	97	41	—	2	50	1	40	45	1	35	4	2
30	83	81.5	97	51	—	2	50	1	40	45	1	35	4	2
40	93	91.5	107	61	—	2	60	1	50	55	1	35	4	2
50	108	106.5	122	71	—	2	35	2	35	35	2	35	6	3
75	147	145.5	161	96	—	2	60	2	60	35	3	70	6	4
100	200	198.5	214	121	169	4	70	2	70	35	4	70	6	5

■ Option

Shock absorber

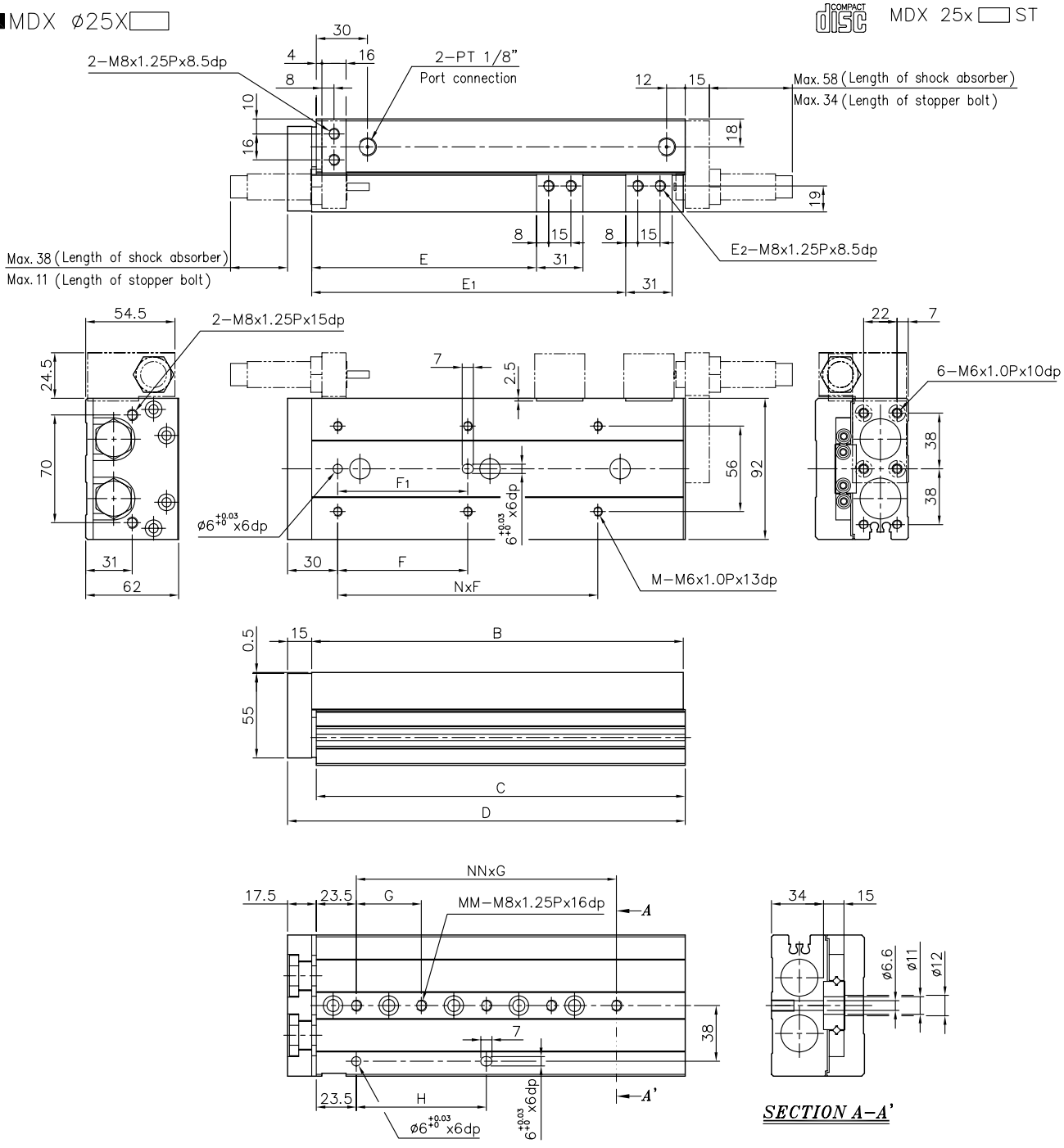


Stopper bolt



■MDX ø25X□

COMPACT disc MDX 25x□ST

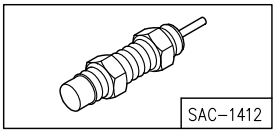


■ Dimensions

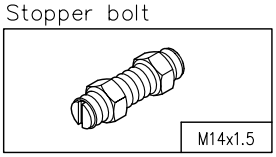
Stroke mm \ Code	B	C	D	E	E1	E2	F	N	F1	G	NN	H	M	MM
10	92	90.5	108	35	—	2	50	1	40	45	1	45	4	2
20	92	90.5	108	45	—	2	50	1	40	45	1	45	4	2
30	92	90.5	108	55	—	2	50	1	40	45	1	45	4	2
40	102	100.5	118	65	—	2	60	1	50	55	1	55	4	2
50	115	113.5	131	75	—	2	35	2	35	35	2	35	6	3
75	156	154.5	172	100	—	2	60	2	60	35	3	70	6	4
100	197	195.5	213	125	162	4	70	2	70	35	4	70	6	5

■ Option

Shock absorber



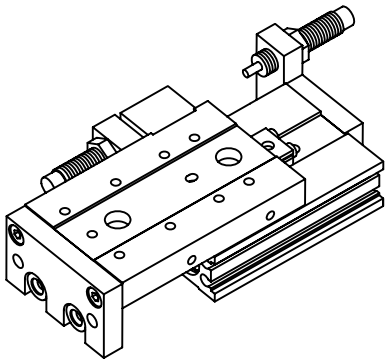
Stopper bolt

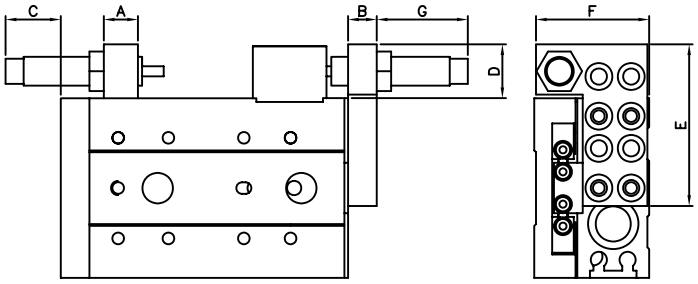


■ Stroke adjust and with shock absorber

– Ⓐ With shock absorber

● MDX External drawing

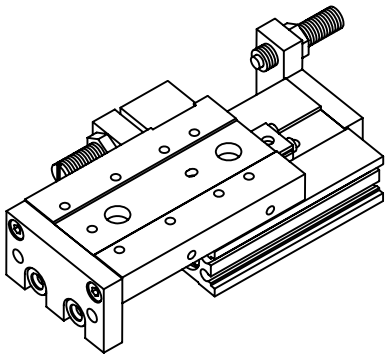


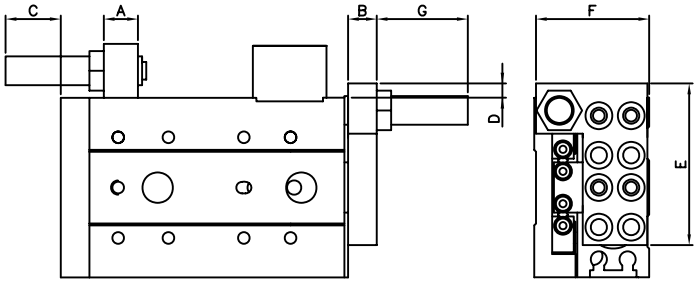


Dimensions / Code / Model	A	B	C	D	E	F	G						
							10ST	20ST	30ST	40ST	50ST	75ST	100ST
MDXø8	7	8	20.5	14.5	38	23.5	20.1	25.1	24.1	–	–	–	–
MDXø12	9.5	8	15.5	15	45	31.5	5	15	25	23	13	26	–
MDXø16	11	10	16	18	55	37.5	8	18	28	28	23	29	29
MDXø20	13	12	44	24.5	70	47.5	38	48	58	58	53	39	59
MDXø25	16	15	38	24.5	80	54.5	36	46	56	56	53	37	58

– Ⓑ With stopper bolt

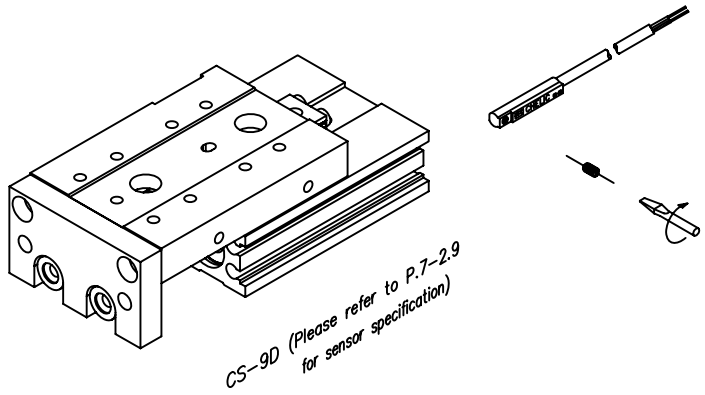
● MDX External drawing





Dimensions / Code / Model	A	B	C	D	E	F	G	Stroke range
MDXø8	7	8	20.5	14.5	38	23.5	19	0~15 mm
MDXø12	9.5	8	4.5	15	45	31.5	19	0~15 mm
MDXø16	11	10	5	18	55	37.5	22	0~20 mm
MDXø20	13	12	17	24.5	70	47.5	37	0~30 mm
MDXø25	16	15	11	24.5	80	54.5	34	0~30 mm

■Sensor installating



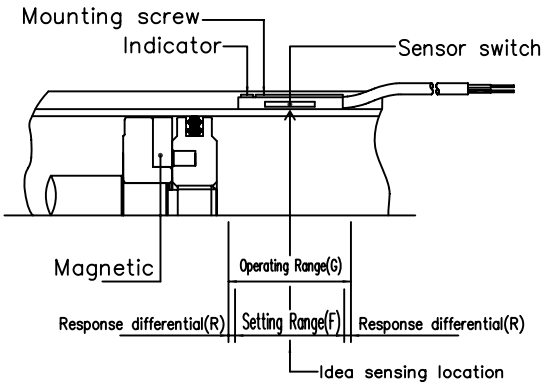
■Operating Range

Sensor is fixed on the cylinder body.
The magnetic piston head will activate the sensor when it enters the operating range.

■Setting Range

When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch.
(Please refer to the below table.)

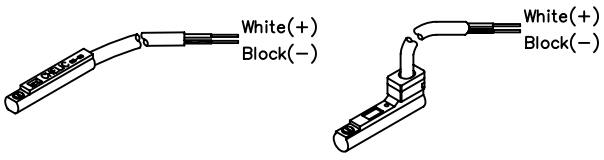
■ Sensor operating range/Sensing location



Unit:mm

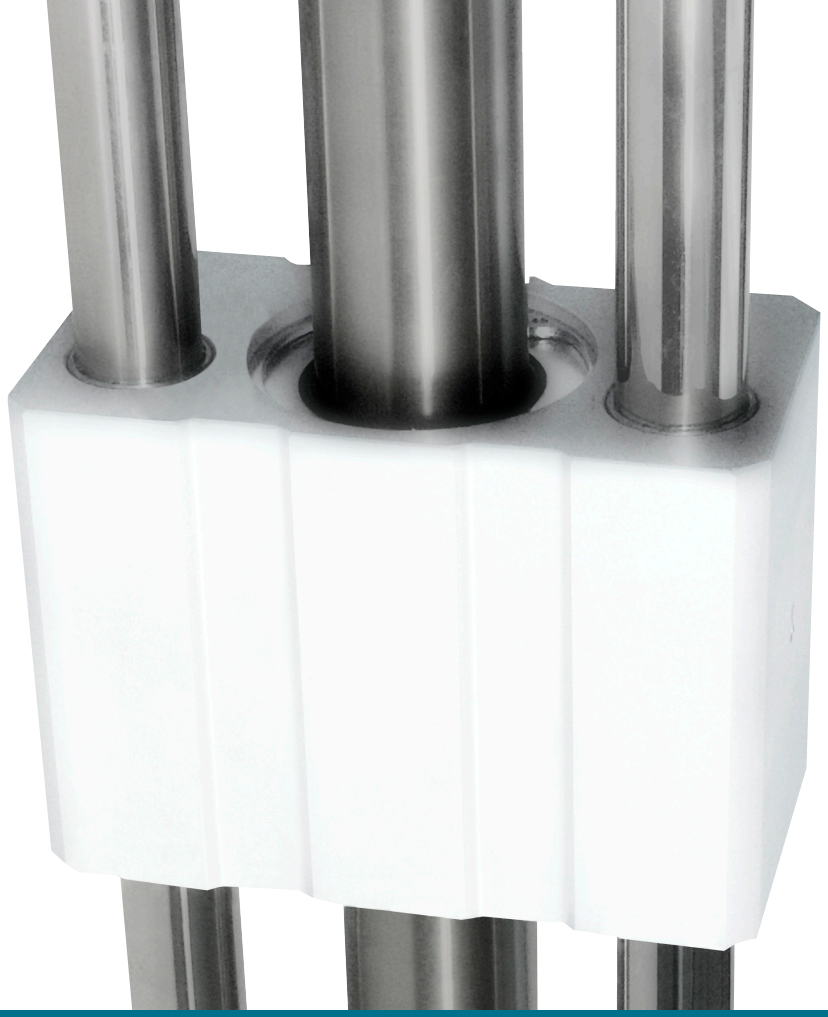
Model	CS-9D(B)		CS-8G	
Bore size	Response differential(F)	Setting Range(R)	Response differential(F)	Setting Range(R)
8	–	–	2.5	1
12	8	1	4.5	1
16	10	1.2	5.3	1.2
20	11	1.2	5.3	1.2
25	9	1.5	5.7	1.5

■ Connection



Voltage: DC 4~120V
AC 4~120V

CS-9D CS-9B



Vi hjälper dig bygga bästa möjliga maskiner. Snart kan du göra dem ännu bättre.

Vårt affärskoncept är en framgångsformel för våra kunder. Vi vet att du som konstruerar maskiner ständigt försöker utveckla prestanda för att ditt företag skall nå välförtjänta framgångar. För att lyckas med detta krävs en oavbruten produktutveckling. Vi arbetar ständigt med förbättringar och kan därmed alltid erbjuda en bästa lösning. Med våra produkter och vår kompetens får du en kontinuerlig möjlighet att skapa nya och bättre affärer.

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