

气动滑台 Slide Table Cylinder

TMX Series

COMMON SPECIFICATION (共同规格)



Bore(缸径)	Ø6	Ø8	Ø12	Ø16	Ø20	Ø25
Fluid(流体)	Clean Air(洁净空气)					
Action(动作形式)	Double Acting(双向)					
Max. Press.(最高使用压力)	0.85Mpa					
Min. Press.(最低使用压力)	0.1Mpa					
Amb. Temp(环境及流体温度)	0~+60°C(未冻结)					
Piston Speed(活塞速度)	100~500mm/s					
Pipe Size(接管口径)	M3x0.5p	M5x0.8p		PT1/8		
Magnet(磁环)	Built-in Magnet(有磁环)					

How to order (型号表示方法)

TMX 20 - 50 - A - M9B - S

Bore 缸径	Stroke 行程	Stroke Adjustment 行程调整	*Auto Switch 磁性开关	No. of Auto Switch 磁性开关数量
6,8,12,16,20,25	Please refer to the table. 请参考行程表	Nil(空) None(无) AS Stopper Bolt (行程调整螺栓)(Front)(前端) AT Stopper Bolt (行程调整螺栓)(Back)(后端) A Stopper Bolt (行程调整螺栓)(Both)(两端) BS Shock Absorber(油压缓冲器)(Front)(前端) BT Shock Absorber(油压缓冲器)(Back)(后端) B Shock Absorber(油压缓冲器)(Both)(两端)	Nil(空) None(无磁性开关) M9B Reed Switch(带有接点磁性开关) M9NP Contactless Switch(无接点磁性开关) A93 Reed Switch(带有接点磁性开关)	Nil(空) 2(个) S 1(个) n n(个)

*Auto Switch (磁性开关) 引线长度表示记号:
无记号-1m(标准)
L-3m
Z-5m

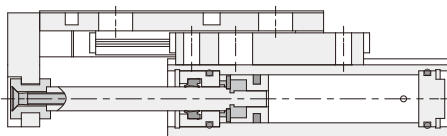
Theoretical force(理论出力表)

Bore (缸径)(mm)	Piston Rod (活塞杆直径)(mm)	Action (动作)	Piston Area (受压面积)	Air Pressure(空气压力)(kgf/cm ²)						
				1	2	3	4	5	6	7
Ø6	3	Push(推)	0.5	—	1.0	1.5	2.0	2.5	3.0	3.5
		Pull(拉)	0.4	—	0.8	1.2	1.6	2.0	2.4	2.8
Ø8	5	Push(推)	1.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
		Pull(拉)	0.7	0.7	1.4	2.1	2.8	3.5	4.2	4.9
Ø12	6	Push(推)	2.2	2.2	4.4	6.6	8.8	11	13.2	15.4
		Pull(拉)	1.7	1.7	3.4	5.1	6.8	8.5	10.2	11.9
Ø16	8	Push(推)	4.0	4.0	8.0	12	16	20	24	28
		Pull(拉)	3.0	3.0	6.0	9.0	12	15	18	21
Ø20	10	Push(推)	6.2	6.2	12.4	18.6	24.8	31	37.2	43.4
		Pull(拉)	4.7	4.7	9.4	14.1	18.8	23.5	28.2	32.9
Ø25	12	Push(推)	9.8	9.8	19.6	29.4	39.2	49	58.5	68.6
		Pull(拉)	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 efficiency have to be taken into considerations. (About 70%~80%)

注: 以上为理论数据, 实际采用前, 需考虑摩擦阻力与机械效率值并加以计算。(约为70%~80%)

Internal Structure (内部结构)

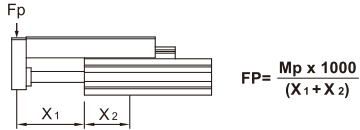


Stroke (行程)

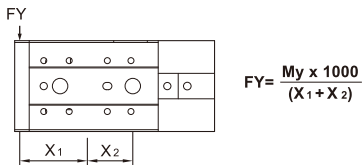
Bore (缸径) (mm)	Stroke (标准行程) (mm)
Ø6	10, 20, 30, 40, 50
Ø8	10, 20, 30, 40, 50, 75
Ø12	10, 20, 30, 40, 50, 75, 100
Ø16	10, 20, 30, 40, 50, 75, 100, 125
Ø20	10, 20, 30, 40, 50, 75, 100, 125, 150
Ø25	10, 20, 30, 40, 50, 75, 100, 125, 150

Load Calculation (负荷计算)

Vertical Moment Of Force(弯曲力矩)



Leaning Sway Moment Of Force (偏转力矩)



Roll Moment Force (回转力矩)



Motionless allowable moment of force (静态力矩) (N·m)

Bore (缸径)(mm)	Stroke (行程)(mm)								
	10	20	30	40	50	75	100	125	150
Ø6	0.7	1.0	1.2	1.2	1.2	-	-	-	-
Ø8	2.0	2.0	2.8	3.6	4.2	4.2	-	-	-
Ø12	4.2	4.2	4.2	5.8	7.0	10.0	10	-	-
Ø16	11.3	11.3	11.3	11.3	15.9	25.0	34.1	34.1	-
Ø20	19.4	19.4	19.4	19.4	27.2	35	50.5	50.5	50.5
Ø25	30.6	30.6	30.6	30.6	42.8	55.1	67.3	67.3	67.3

Note: 1. Please do not exceed load limit. It will effect on the precision of the slide rail if it exceeds the limit.

2. Avoid hitting with great force.

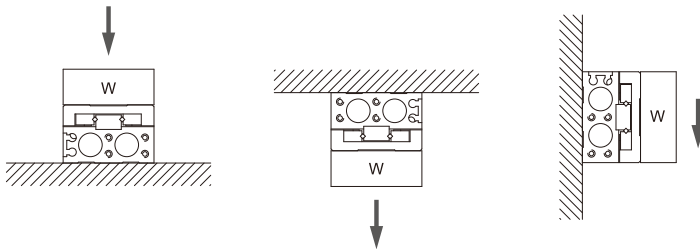
3. Inertial load must be with in 1/10 or the allowable motionless load.

注意: 1. 请勿超负荷界限使用, 超负荷使用将影响轨道的精度。

2. 避免外力瞬间撞击。

3. 惯性负荷应低于静负荷的1/10。

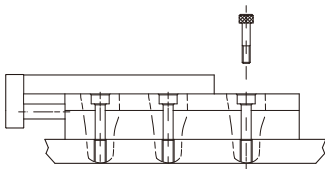
Maximum Allowable Load Weight (最大允许负载重量)



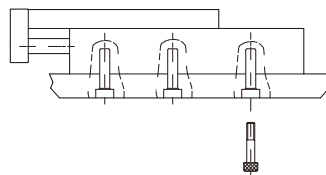
Bore (缸径)(mm)	Maximum allowable load weight (最大允许负载重量)(kg)
Ø6	0.6
Ø8	1
Ø12	2
Ø16	4
Ø20	6
Ø25	9

Mounting Type (安装方式)

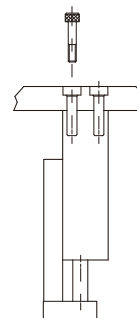
Top Mounting Type(顶部安装)



Bass Mounting(底部安装)



End Vertical Mounting(后端垂直固定安装)

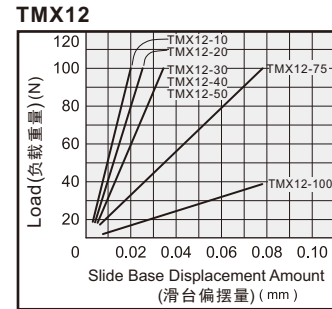
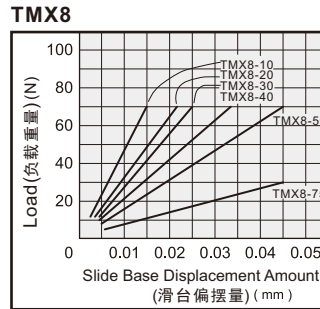
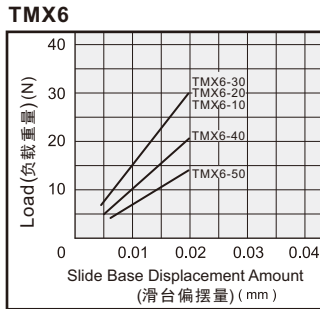
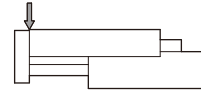


气动滑台 Slide Table Cylinder

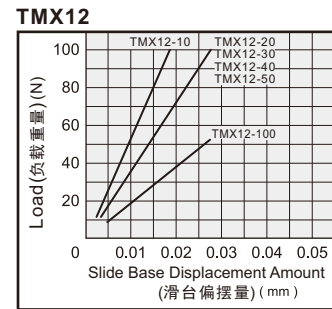
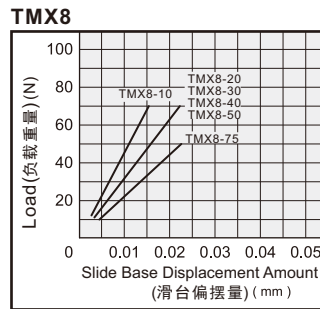
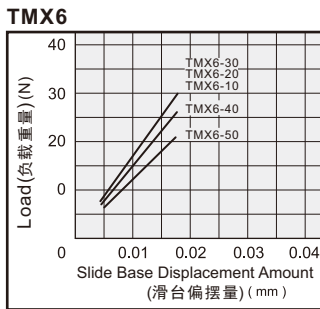
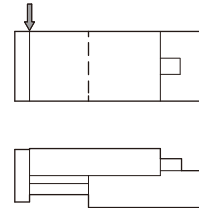
TMX Series

Slide Base Deflection(滑台的偏摆量)

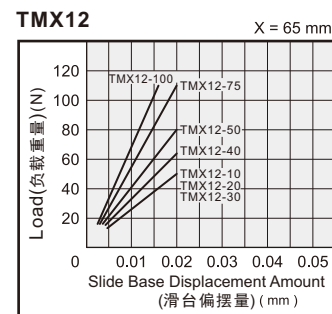
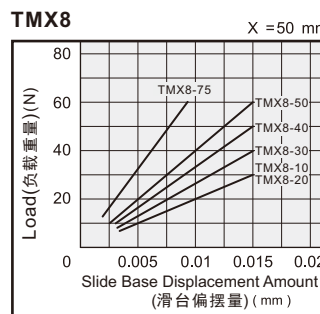
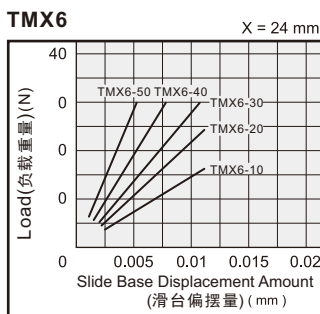
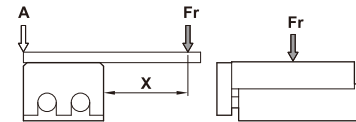
- Slide base displacement due to pitch moment load (水平负载的滑台偏摆量)
Slide base displacement when loads are applied to the section marked with the arrow at the full stroke.
(滑台伸出时, 负载的重量使滑台在箭头记号处所产生的偏摆量)



- Slide base displacement due to yaw moment load (侧向负载的滑台偏摆量)
Slide base displacement when loads are applied to the section marked with the arrow at the full stroke.
(滑台伸出时, 负载的重量使滑台在箭头记号处所产生的偏摆量)



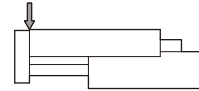
- Slide base displacement due to roll moment load. (偏移负载的滑台偏摆量)
Slide base displacement of section A when loads are applied to the section f with the slide table retracted.
(负载偏移气缸中心所产生的扭矩在箭头记号处所产生的偏摆量)



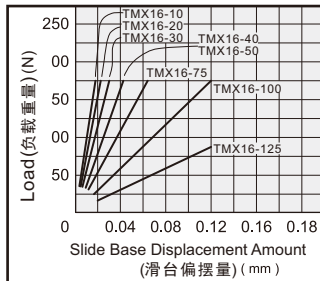
气动滑台 Slide Table Cylinder TMX Series

Slide Base Deflection(滑台的偏摆量)

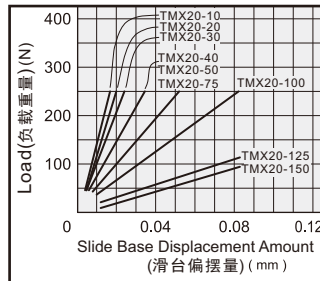
- Slide base displacement due to pitch moment load (水平负载的滑台偏摆量)
Slide base displacement when loads are applied to the section marked with the arrow at the full stroke.
(滑台伸出时, 负载的重量使滑台在箭头记号处所产生的偏摆量)



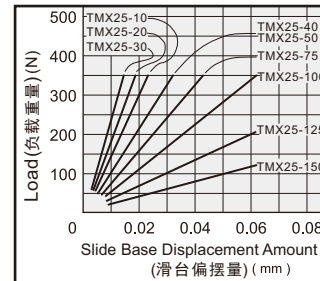
TMX16



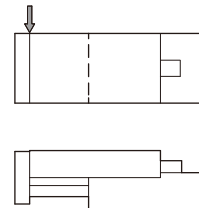
TMX20



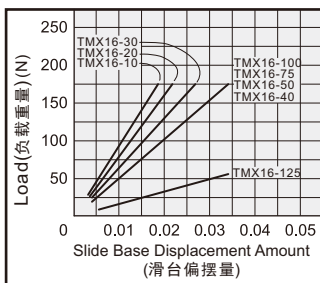
TMX25



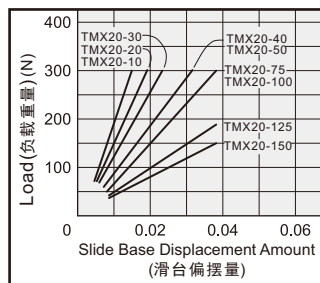
- Slide base displacement due to yaw moment load (侧向负载的滑台偏摆量)
Slide base displacement when loads are applied to the section marked with the arrow at the full stroke.
(滑台伸出时, 负载的重量使滑台在箭头记号处所产生的偏摆量)



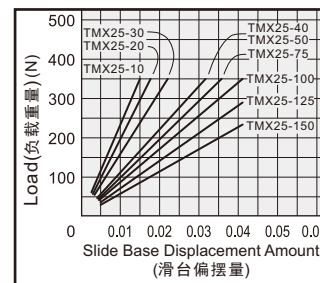
TMX16



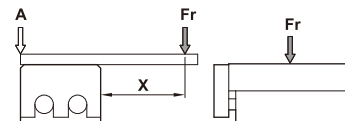
TMX20



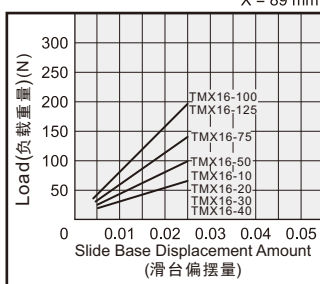
TMX25



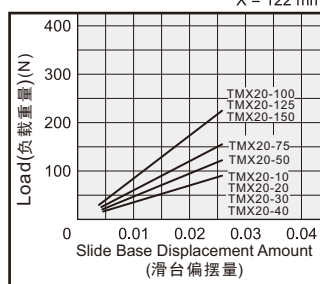
- Slide base displacement due to roll moment load. (偏移负载的滑台偏摆量)
Slide base displacement of section A when loads are applied to the section f with the slide table retracted.
(负载偏移气缸中心所产生的扭矩在箭头记号处所产生的偏摆量)



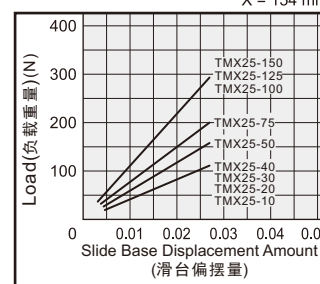
TMX16



TMX20



TMX25

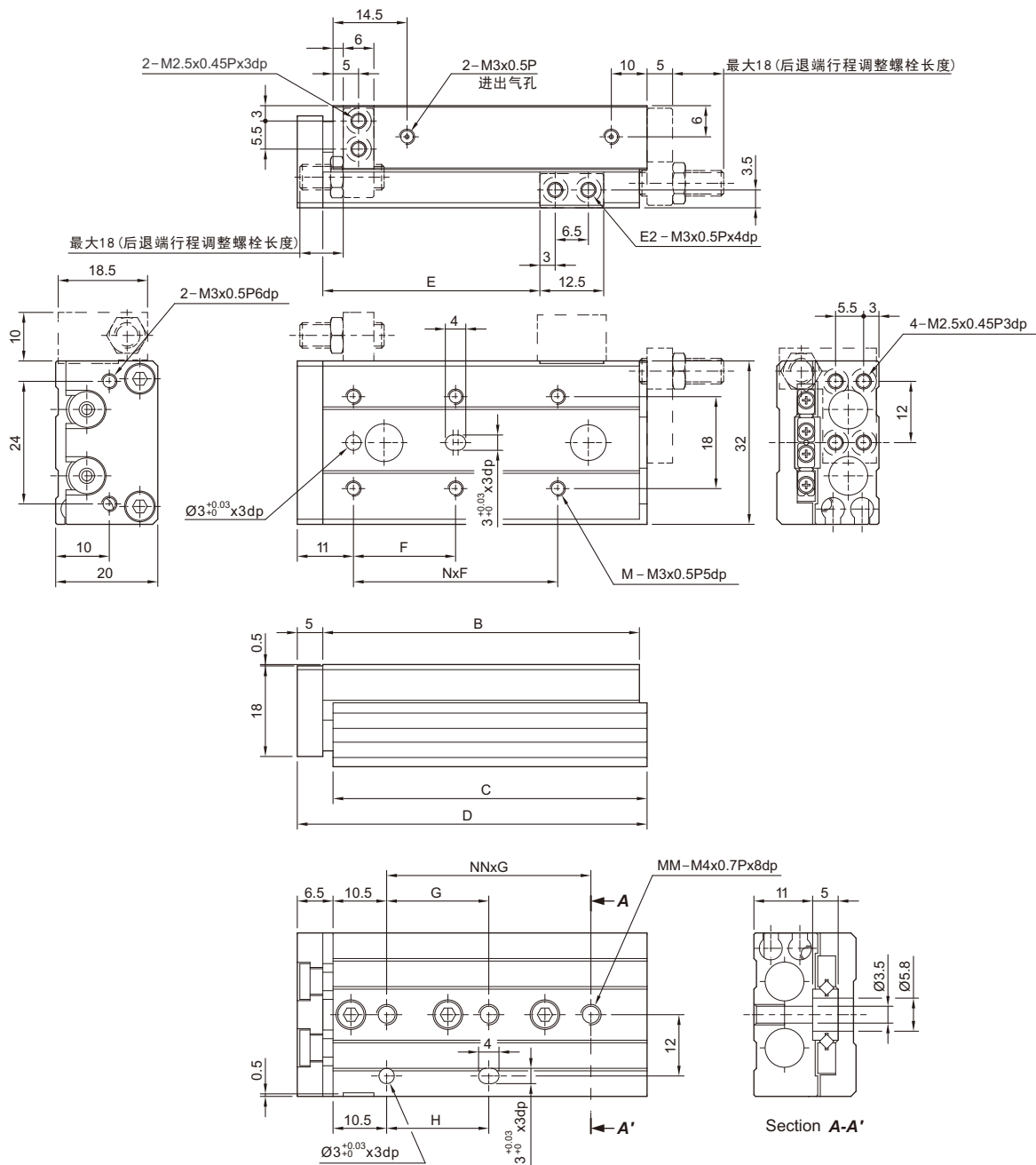


气动滑台 Slide Table Cylinder

TMX Series

Dimensions(mm)(外形尺寸图(毫米))

TMX6



代号 行程 mm	B	C	D	E	E ₂	F	N	G	NN	H	M	MM
10	42	41.5	48	22.5	2	20	1	25	1	20	4	2
20	52	51.5	58	32.5	2	30	1	35	1	20	4	2
30	62	61.5	68	42.5	2	20	2	20	2	20	6	3
40	84	83.5	90	52.5	2	28	2	30	2	30	6	3
50	100	99.5	106	62.5	2	38	2	24	3	48	6	4

Option(可选配件)

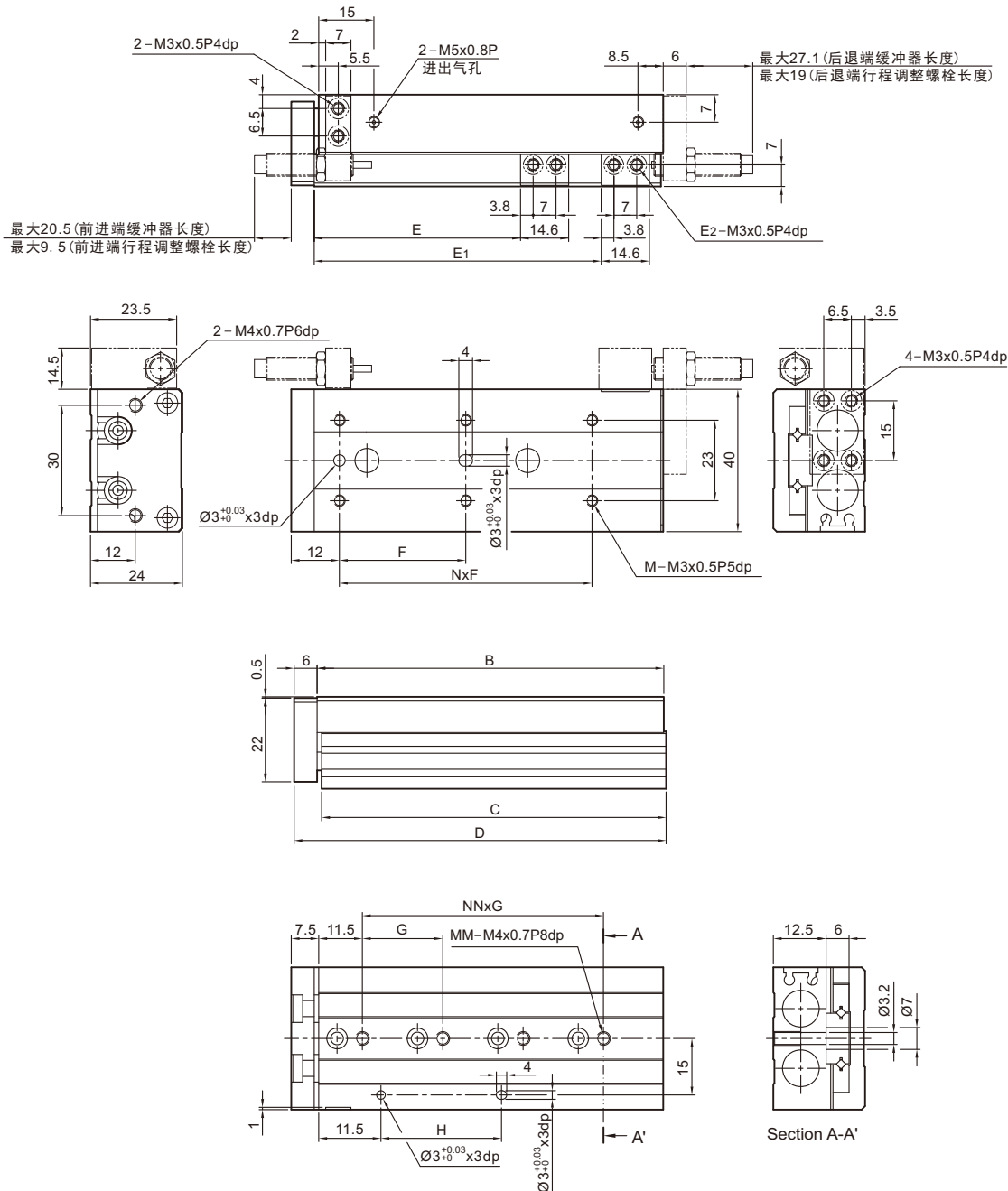
Stopper Bolt (行程调整螺栓)



M5x0.8p

Dimensions(mm)(外形尺寸图(毫米))

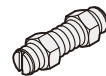
TMX8



代号 行程 mm	B	C	D	E	E ₁	E ₂	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
40	83	82.5	90	53.5	-	2	50	1	28	2	28	4	3
50	101	100.5	108	63.5	82.5	4	38	2	23	3	50	6	4
75	151	150.5	158	88.5	132.5	4	50	2	28	4	56	6	5

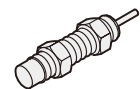
Option(可选配件)

Stopper Bolt (行程调整螺栓)



A-M5x0.8p

Shock Absorber(油压缓冲器)



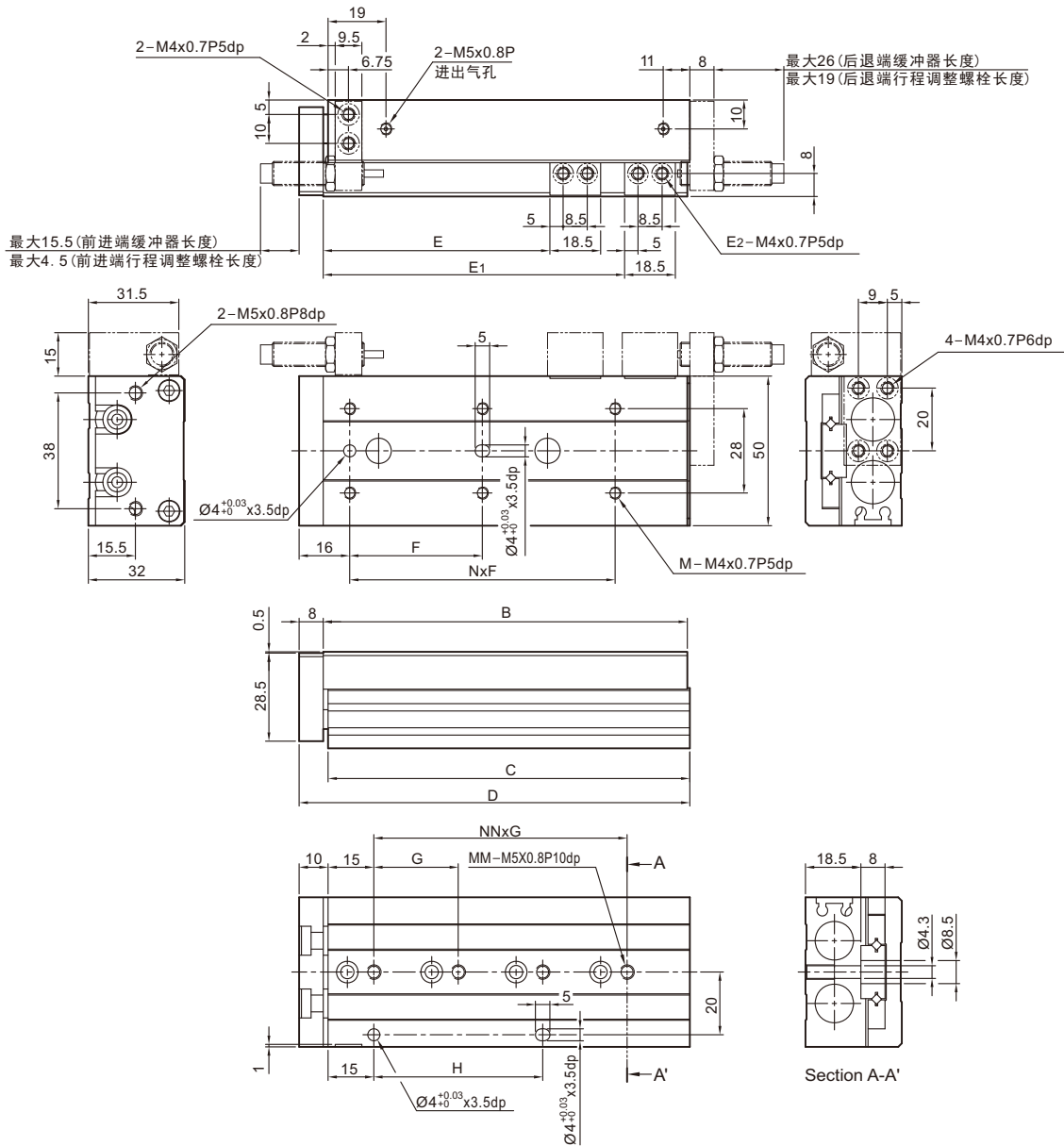
B-0806

气动滑台 Slide Table Cylinder

TMX Series

Dimensions(mm)(外形尺寸图(毫米))

TMX12



代号 行程 mm	B	C	D	E	E ₁	E ₂	F	N	G	NN	H	M	MM
10	71	70	80	26.5	—	2	35	1	40	1	40	4	2
20	71	70	80	36.5	—	2	35	1	40	1	40	4	2
30	71	70	80	46.5	—	2	35	1	40	1	40	4	2
40	83	82	92	56.5	—	2	50	1	25	2	25	4	3
50	103	102	112	66.5	—	2	35	2	36	2	36	6	3
75	149	148	158	91.5	125.5	4	55	2	36	3	72	6	4
100	203	202	212	116.5	179.5	4	65	2	38	4	76	6	5

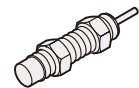
Option(可选配件)

Stopper Bolt (行程调整螺栓)



A-M5x0.8p

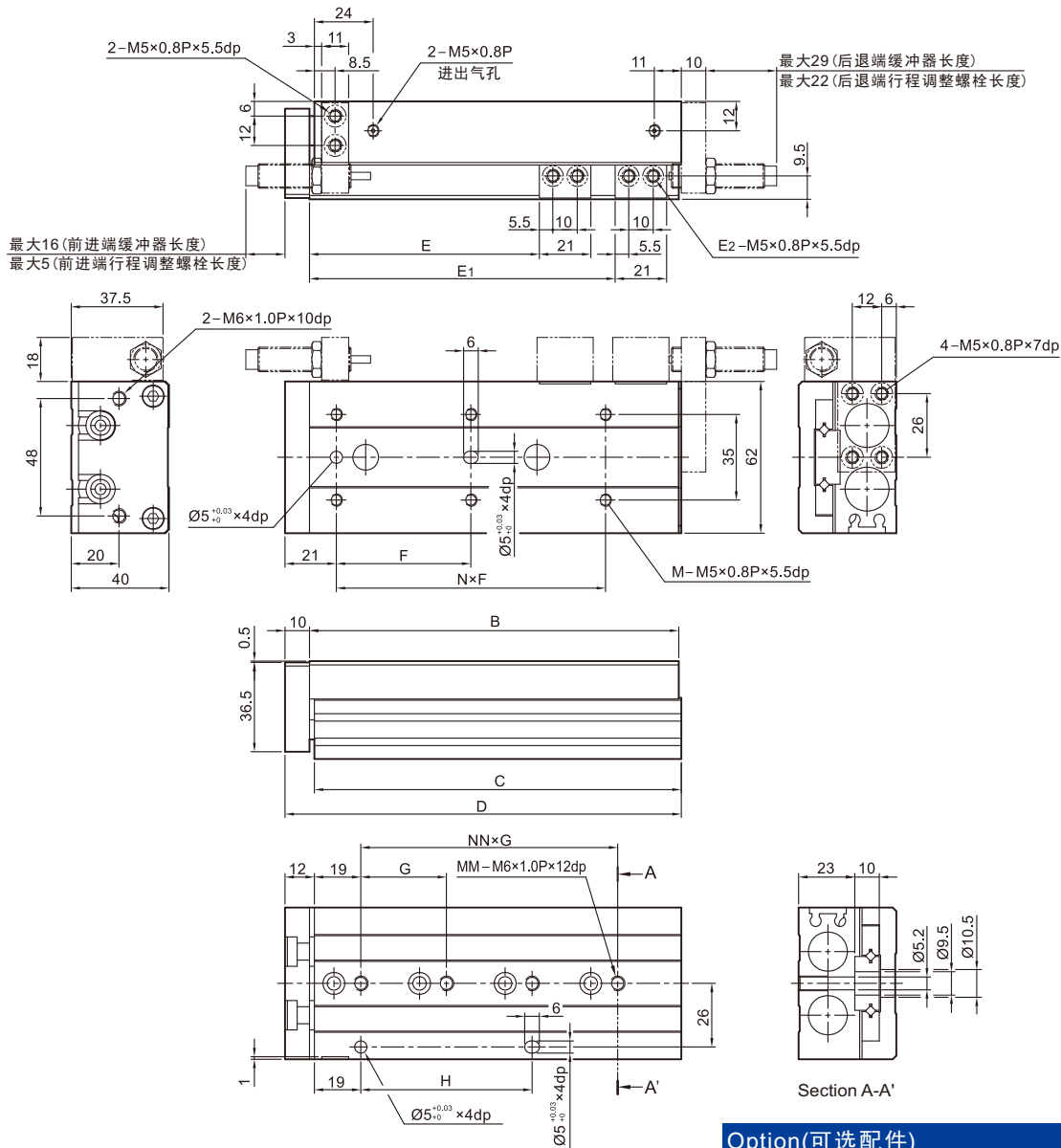
Shock Absorber(油压缓冲器)



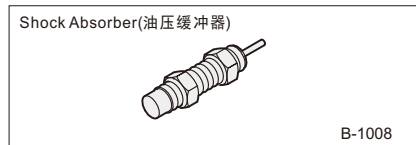
B-0806

Dimensions(mm)(外形尺寸图(毫米))

TMX16



Option(可选配件)



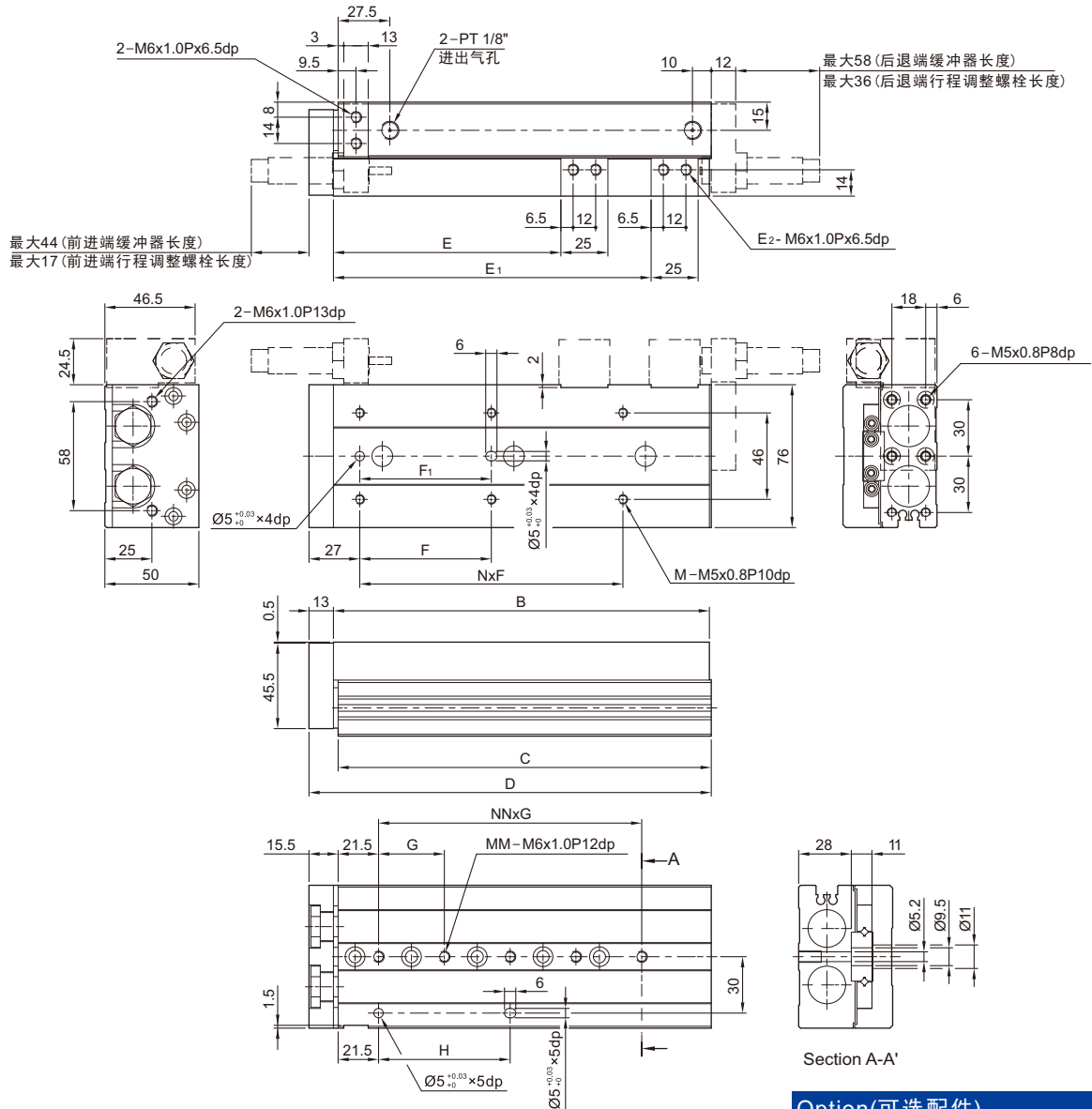
代号 行程 mm	B	C	D	E	E1	E2	F	N	G	NN	H	M	MM
10	76	75	87	29	—	2	35	1	40	1	40	4	2
20	76	75	87	39	—	2	35	1	40	1	40	4	2
30	76	75	87	49	—	2	35	1	40	1	40	4	2
40	86	85	97	59	—	2	40	1	50	1	50	4	2
50	101	100	112	69	—	2	30	2	30	2	30	6	3
75	151	150	162	94	125	4	55	2	35	3	70	6	4
100	199	198	210	119	173	4	65	2	35	4	70	6	5
125	249	248	260	144	223	4	70	2	35	6	70	6	7

气动滑台 Slide Table Cylinder

TMX Series

Dimensions(mm)(外形尺寸图(毫米))

TMX20



Option(可选配件)

Stopper Bolt (行程调整螺栓)



A-M14x1.5p

Shock Absorber(油压缓冲器)

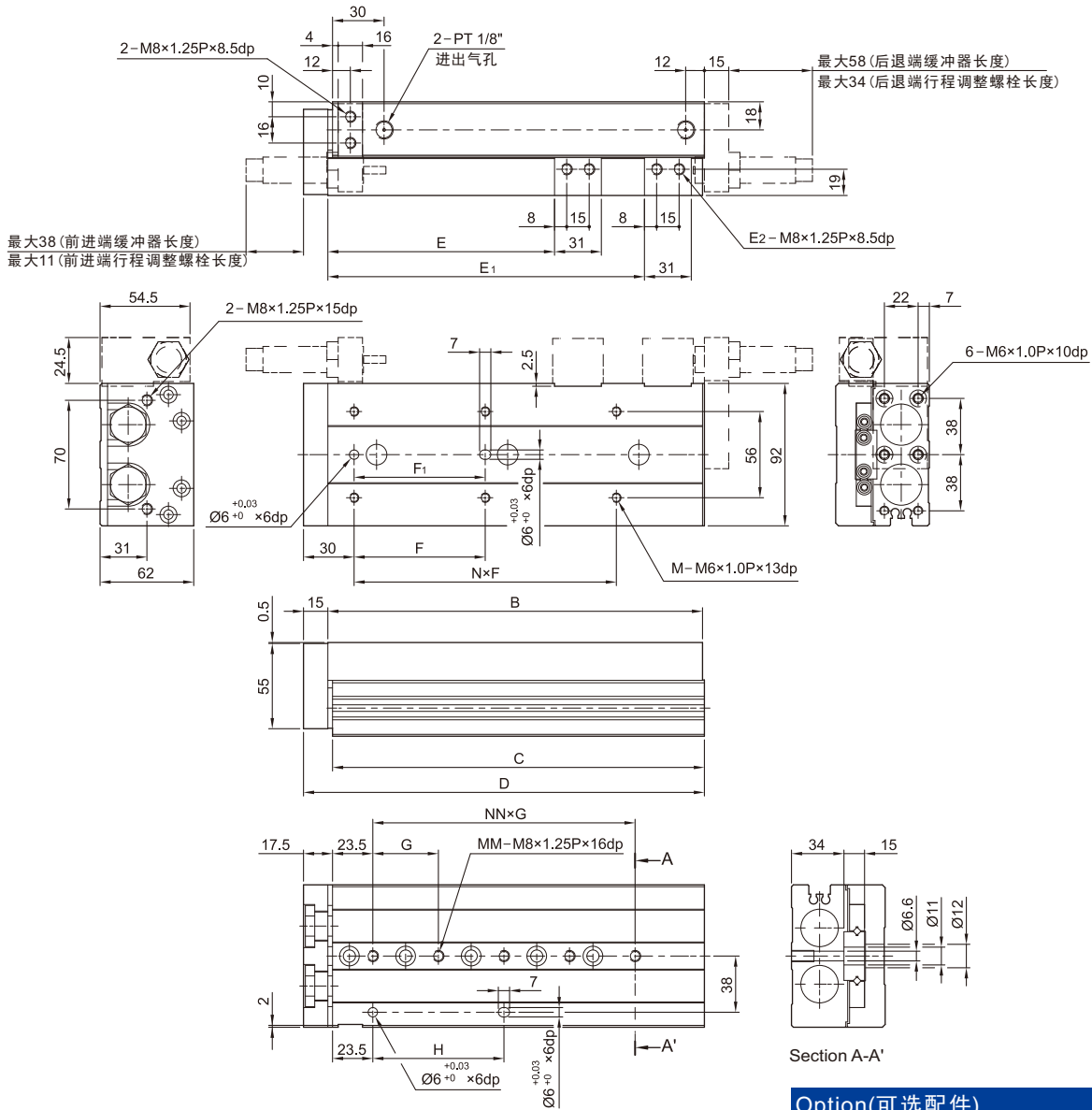


B-1412

代号 行程 mm	B	C	D	E	E ₁	E ₂	F	N	F ₁	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	168	4	70	2	70	35	4	70	6	5
125	254	252.5	268	146	223	4	70	3	70	38	5	75.5	8	6
150	306	304.5	320	171	275	4	80	3	80	44	6	87.5	8	7

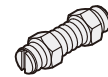
Dimensions(mm)(外形尺寸图(毫米))

TMX25



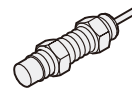
Option(可选配件)

Stopper Bolt (行程调整螺栓)



A-M14x1.5p

Shock Absorber(油压缓冲器)



B-1412

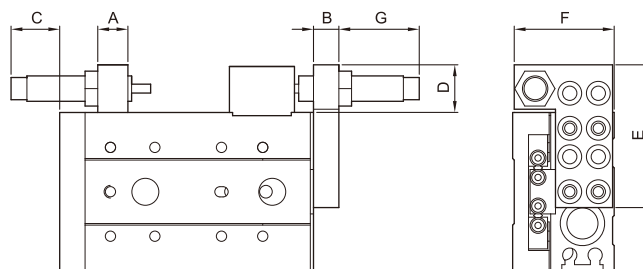
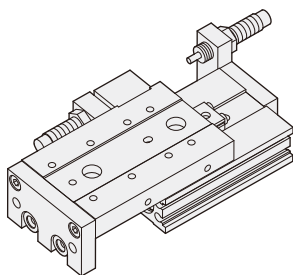
代号 行程 mm	B	C	D	E	E ₁	E ₂	F	N	F ₁	G	NN	H	M	MM
10	92	90.5	108	35	—	2	50	1	40	45	1	45	4	2
20	92	90.5	108	45	—	2	50	1	40	45	1	45	4	2
30	92	90.5	108	55	—	2	50	1	40	45	1	45	4	2
40	102	100.5	118	65	—	2	60	1	50	55	1	55	4	2
50	115	113.5	131	75	—	2	35	2	35	35	2	35	6	3
75	156	154.5	172	100	—	2	60	2	60	35	3	70	6	4
100	197	195.5	213	125	162	4	70	2	70	35	4	70	6	5
125	255	253.5	271	150	218	4	75	3	75	38	5	76	8	6
150	295	293.5	311	175	258	4	80	3	80	40	6	80	8	7

气动滑台

Slide Table Cylinder

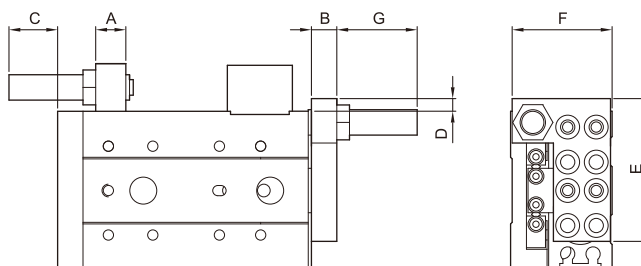
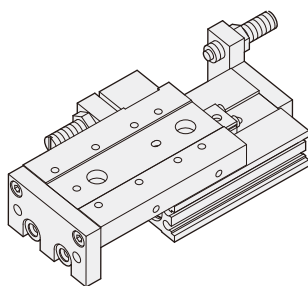
TMX Series

Stroke Adjustment And With Shock Absorber(可调行程及油压缓冲器)



代号 规格	A	B	C	D	E	F	G						
							10ST	20ST	30ST	40ST	50ST	75ST	100ST
TMX8	7	8	20.8	14.5	38	23.5	20.1	25.1	24.1	—	—	—	—
TMX12	9.5	8	15.5	15	45	31.5	5	15	25	23	13	26	—
TMX16	11	10	16	18	55	37.5	8	18	28	28	23	29	29
TMX20	13	12	44	24.5	70	47.5	38	48	58	58	53	39	59
TMX25	16	15	38	24.5	80	54.5	36	46	56	56	53	37	58

Stroke Adjustment And With stopper bolt(可调行程及行程调整螺栓)



代号 规格	A	B	C	D	E	F	G	Stroke adjustment (可调行程范围)
TMX6	6	5	11.5	2.5	22.5	19	21.3	0 ~ 18 mm
TMX8	7	8	20.8	14.5	38	23.5	19	0 ~ 15 mm
TMX12	9.5	8	15.5	15	45	31.5	19	0 ~ 15 mm
TMX16	11	10	16	18	55	37.5	22	0 ~ 20 mm
TMX20	13	12	44	24.5	70	47.5	37	0 ~ 30 mm
TMX25	16	15	38	24.5	80	54.5	34	0 ~ 30 mm