

GXH Series Compact Slide



Specification

Bore (mm)	6	10	16	20
Linear guide width	5	7	9	12
Fluid	Compressed air			
Action	Double acting			
Max. pressure	0.15MPa	0.10MPa		
Min. pressure	0.7MPa			
Piston speed	50~500mm/s			
Allowable kinetic energy	0.0125	0.025	0.05	0.1
Lubrication	Non-lube			
Cushion	Rubber bumper on both sides			
Port size	M5X0.8			

Ordering code

GXH

20

-

30

Bore

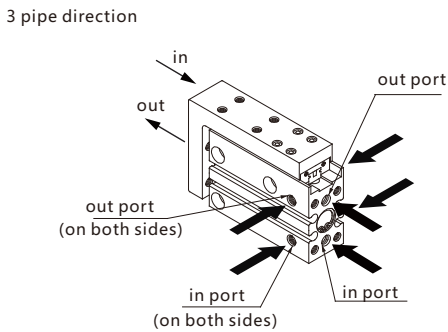
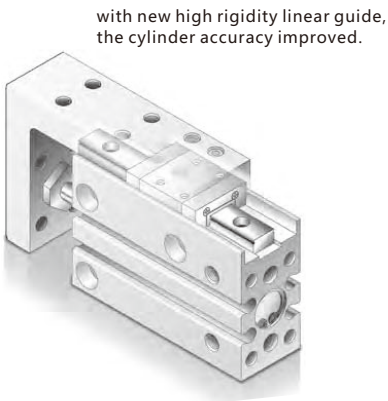
6	Ø6
10	Ø10
16	Ø16
20	Ø20

Stroke

30

Stroke/Auto switch type

Bore (mm)	Standard stroke(mm)	Switch model
6	5、10、15、20、25、30、40、50、60	
10		
16		
20		



Application samples

Different adaption

Parallel divider

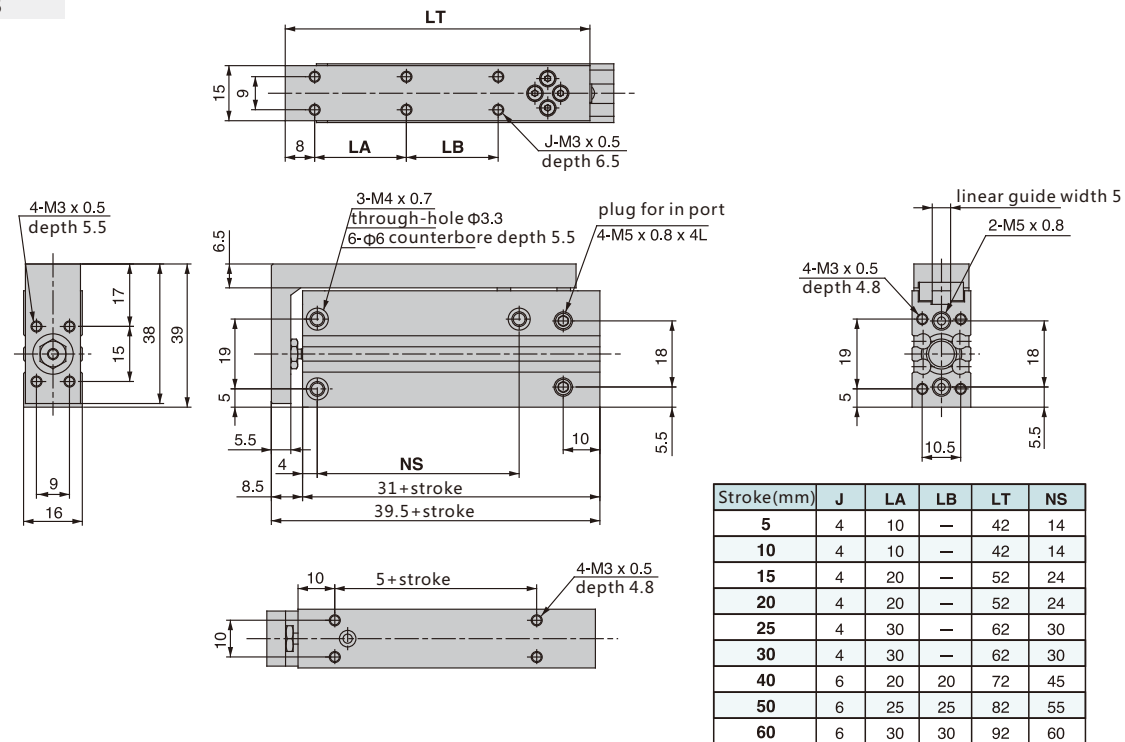
Workpiece transfer

Adapt vacuum pad

Pinhole locator

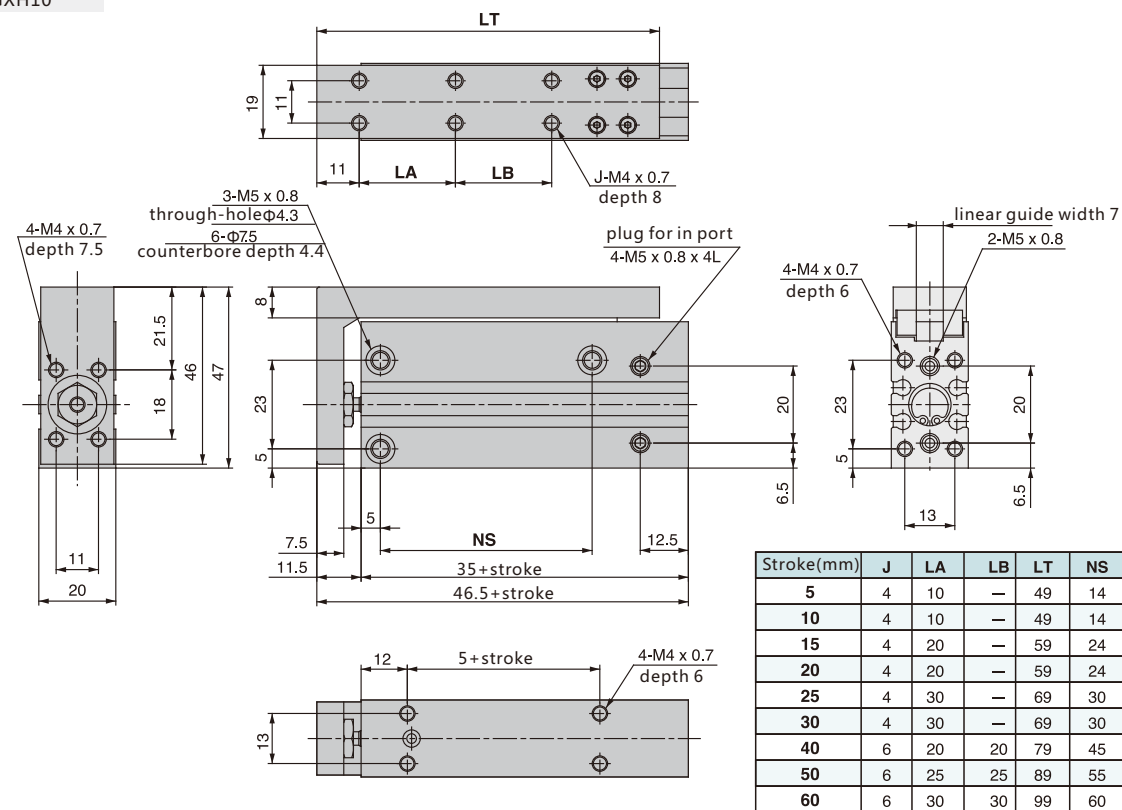
■ Dimensions (mm)

GXH6



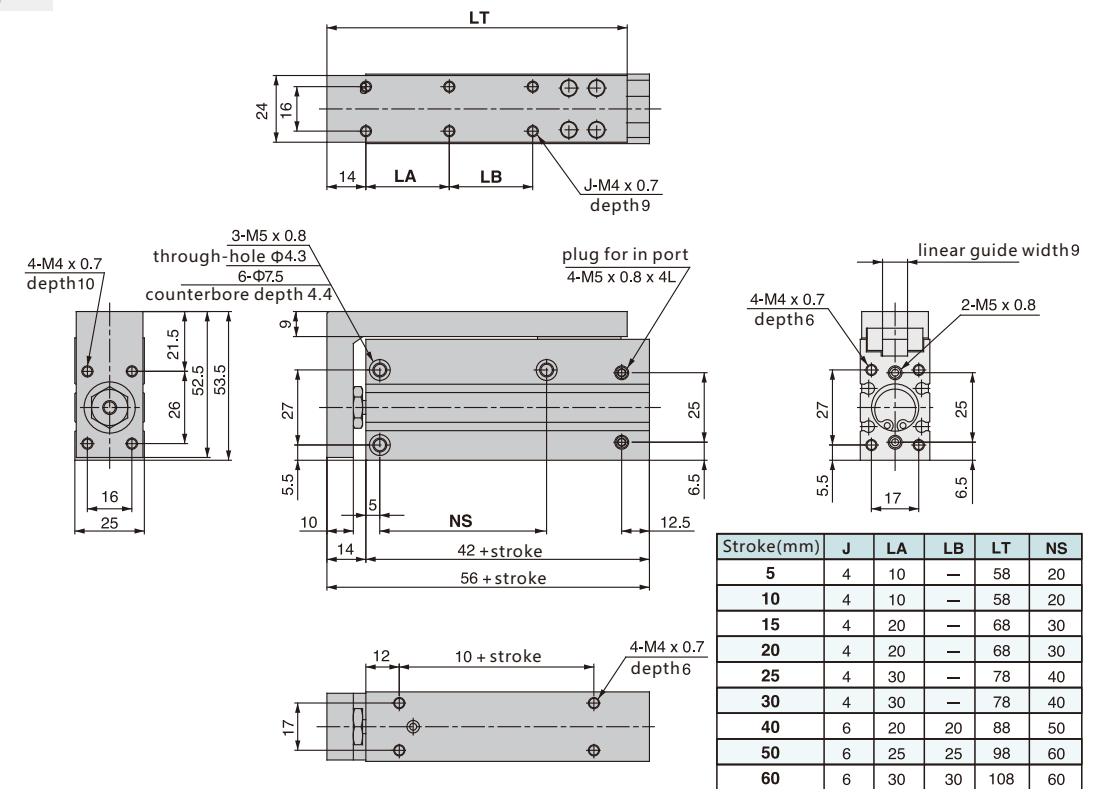
■ Dimensions (mm)

GXH10



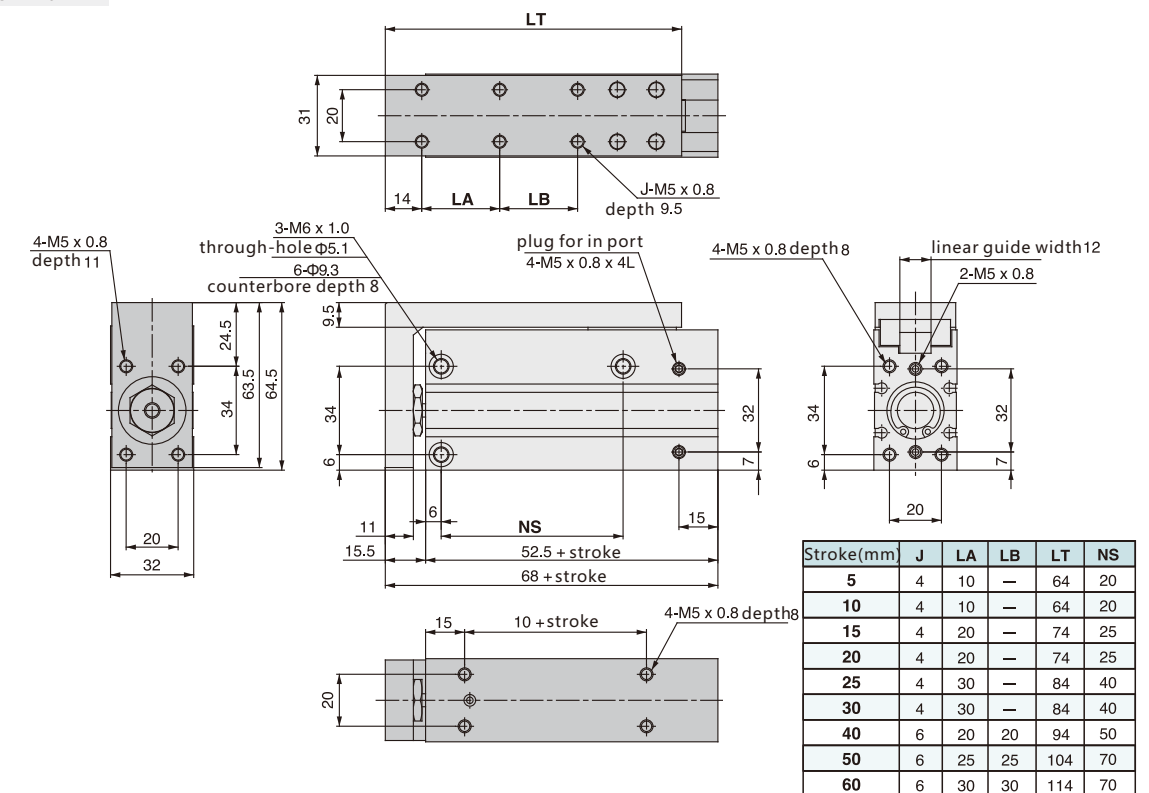
■ Dimensions (mm)

GXH16

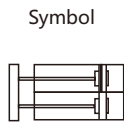


■ Dimensions (mm)

GXH20



Product feature

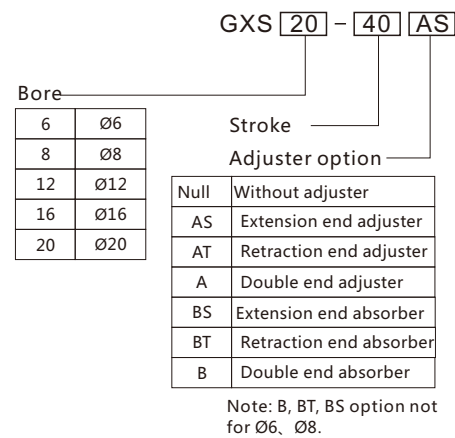


With stroke adjuster option (0~5mm)
Double housing design, 2 times output force, thin body
Adopt cross ball guide way design, low friction, no gap
between table and cylinder
Suitable for precision assembly, three mount options
Internal magnet, could mount switch.

Specification

Series	GXS6	GXS8	GXS12	GXS16	GXS20
Bore	Φ6x2(same to Φ8)	Φ8x2(same to Φ11)	Φ12x2(same to Φ17)	Φ16x2(same to Φ22)	Φ20x2(same to Φ28)
Fluid	Compressed				
Action	Double acting				
Max. pressure	0.7MPa				
Min. pressure	0.15MPa				
Ambient and fluid temp.	-10~+60°C (No freezing)				
Piston speed	50~500mm/s				
Cushion	Rubber bumper(standard)				
Lubrication	Non-lube				
Port size	M3x0.5	M5x0.8			Rc1/8

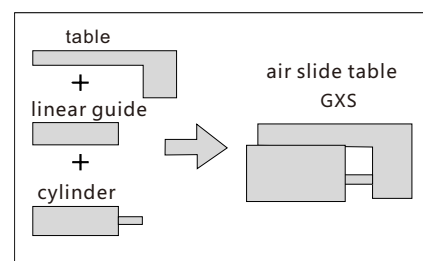
Ordering code



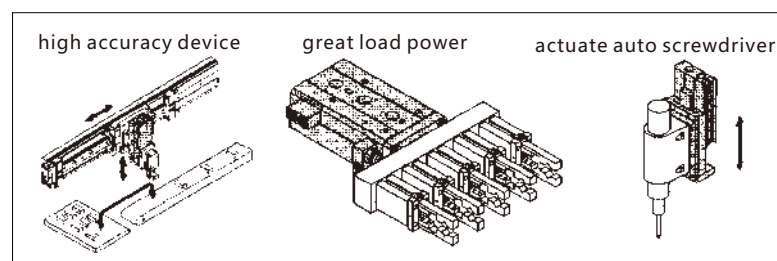
Stroke/Auto switch type

Bore	Stroke (mm)										Options	Switch model
	10	20	30	40	50	75	100	125	150			
Φ6x2	●	●	●	●	●						●	Direct mount
Φ8x2	●	●	●	●	●	●					●	
Φ12x2	●	●	●	●	●	●	●				●	
Φ16x2	●	●	●	●	●	●	●	●			●	
Φ20x2	●	●	●	●	●	●	●	●	●		●	

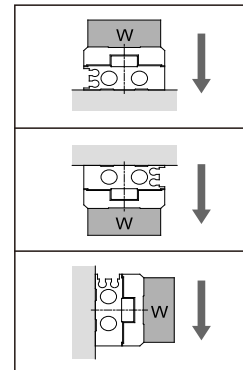
Combination of cylinder and table



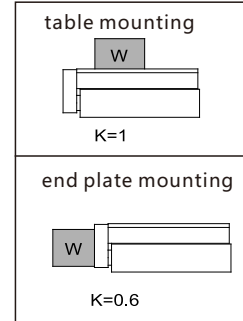
High accuracy and strong use



Load mass: W(kg)



Workpiece mounting coefficients: K



Max. allowable load mass: Wmax(kg)

Series	Max. allowable load mass
GXS6	0.6
GXS8	1
GXS12	2
GXS16	4
GXS20	6

Overhang: Ln(mm),correction value of moment center position distance: An(mm)

	Pitch moment	Yaw moment	Roll moment
static moment			
Dynamic moment			

note) static moment: moment generated by gravity.
Dynamic moment: moment generated by impact when colliding with stopper.

Max. allowable kinetic energy: Emax(J)

Series	Allowable kinetic energy	
	Rubber bumper	shock absorber
GXS6	0.018	-
GXS8	0.027	-
GXS12	0.055	0.11
GXS16	0.11	0.22
GXS20	0.16	0.32

Correction value of moment center position distance: An(mm)

Series	Correction value of moment center position distance					
	A1	A2	A3	A4	A5	A6
GXS6	11	6	13	16	16	6
GXS8	11	7.5	13	20	20	7.5
GXS12	24	8.5	26	25	25	8.5
GXS16	27	10	30	31	31	10
GXS20	34	14.5	36	38	38	14.5

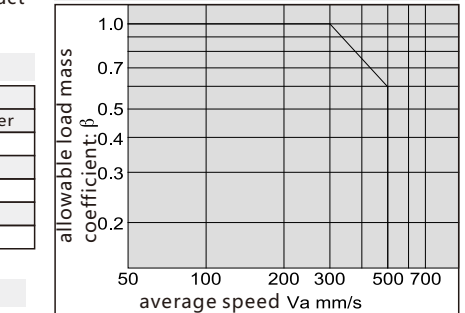
Max. allowable moment: Mmax(N.m)

Series	Stroke (mm)								
	10	20	30	40	50	75	100	125	150
GXS6	0.7	1.0	1.2	1.2	1.2				
GXS8	2.0	2.0	2.8	3.6	4.2	4.2			
GXS12	4.2	4.2	4.2	5.8	7.0	10.0	10.0		
GXS16	11.3	11.3	11.3	11.3	15.9	25.0	34.1	34.1	
GXS20	19.4	19.4	19.4	19.4	27.2	35.0	50.5	50.5	50.5

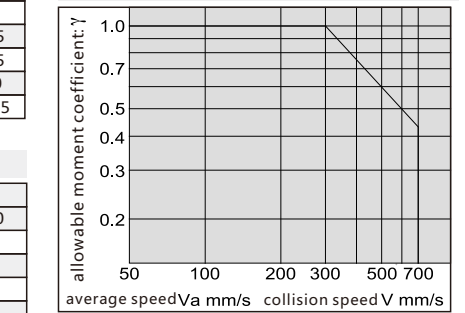
Symbol

Symbol	Definition	Unit
An(n=1~6)	Correction value of moment center position distance	mm
E	Kinetic energy	J
Ea	Allowable kinetic energy	J
Emax	Max. allowable kinetic energy	J
Ln(n=1~3)	Overhang	mm
M(Mp,My,Mr)	Static moment (Pitch, Yaw, Roll)	N·m
Ma(Map,May,Mar)	Allowable static moment (Pitch, Yaw, Roll)	N·m
Me(Mep,Mey)	Dynamic moment (Pitch, Yaw)	N·m
Mea(Meap,Meay)	Allowable dynamic moment (Pitch, Yaw)	N·m
Mmax(Mpmax,Mymax,Mrmx)	Max. allowable moment (Pitch, Yaw, Roll)	N·m
V	Collision speed	mm/s

Allowable load mass coefficient:β



Allowable moment coefficient:γ

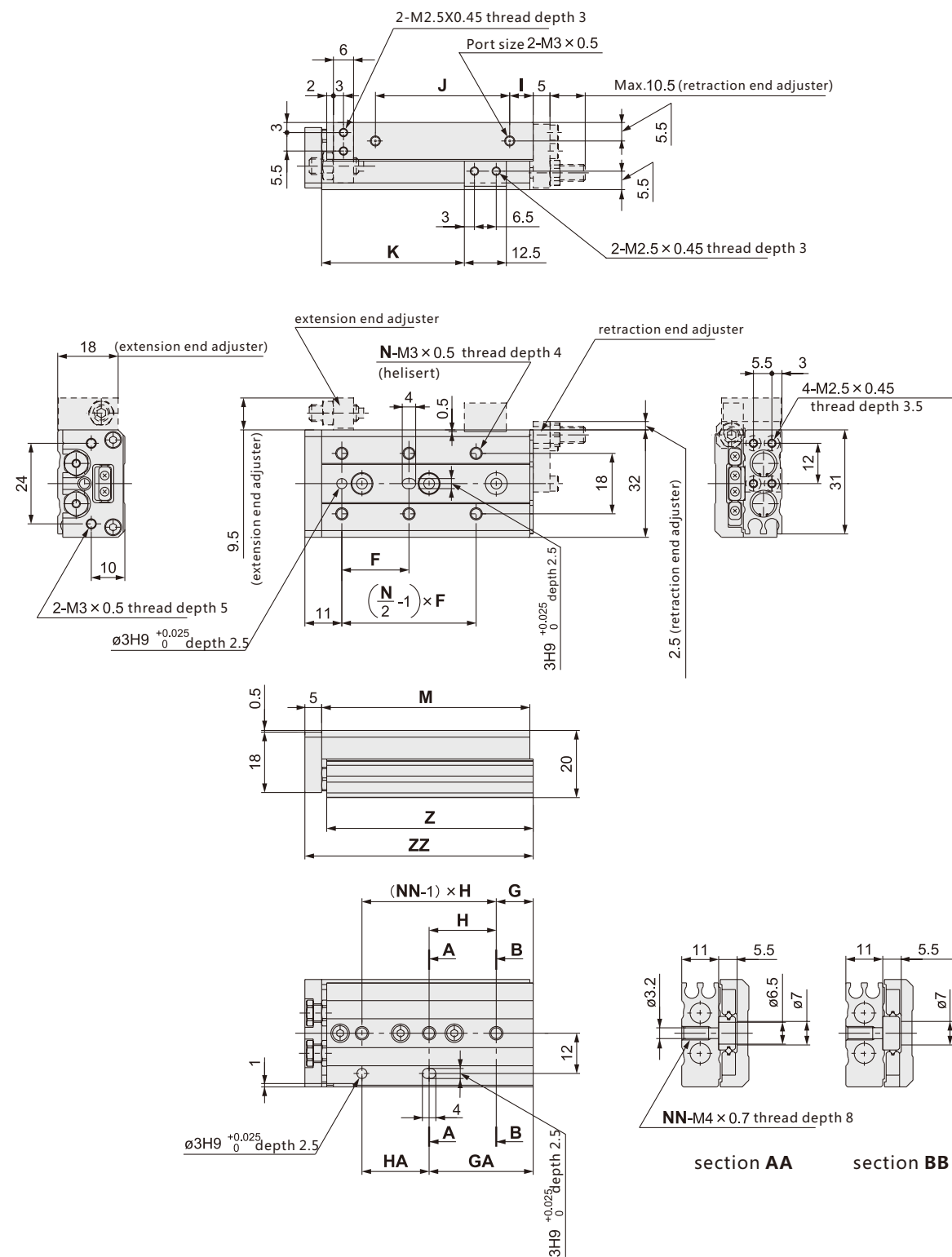


note) use the average speed when static moment
use the collision speed when dynamic moment

Symbol	Definition	Unit
Va	Average speed	mm/s
W	Load mass	kg
Wa	Allowable load mass	kg
We	Mass equivalent to impact	kg
Wmax	Max. allowable load mass	kg
α	Load factor	-
β	Allowable load mass coefficient	-
γ	Allowable moment coefficient	-
δ	Damper coefficient	-
k	Workpiece mounting coefficient	-

■ Dimensions (mm)

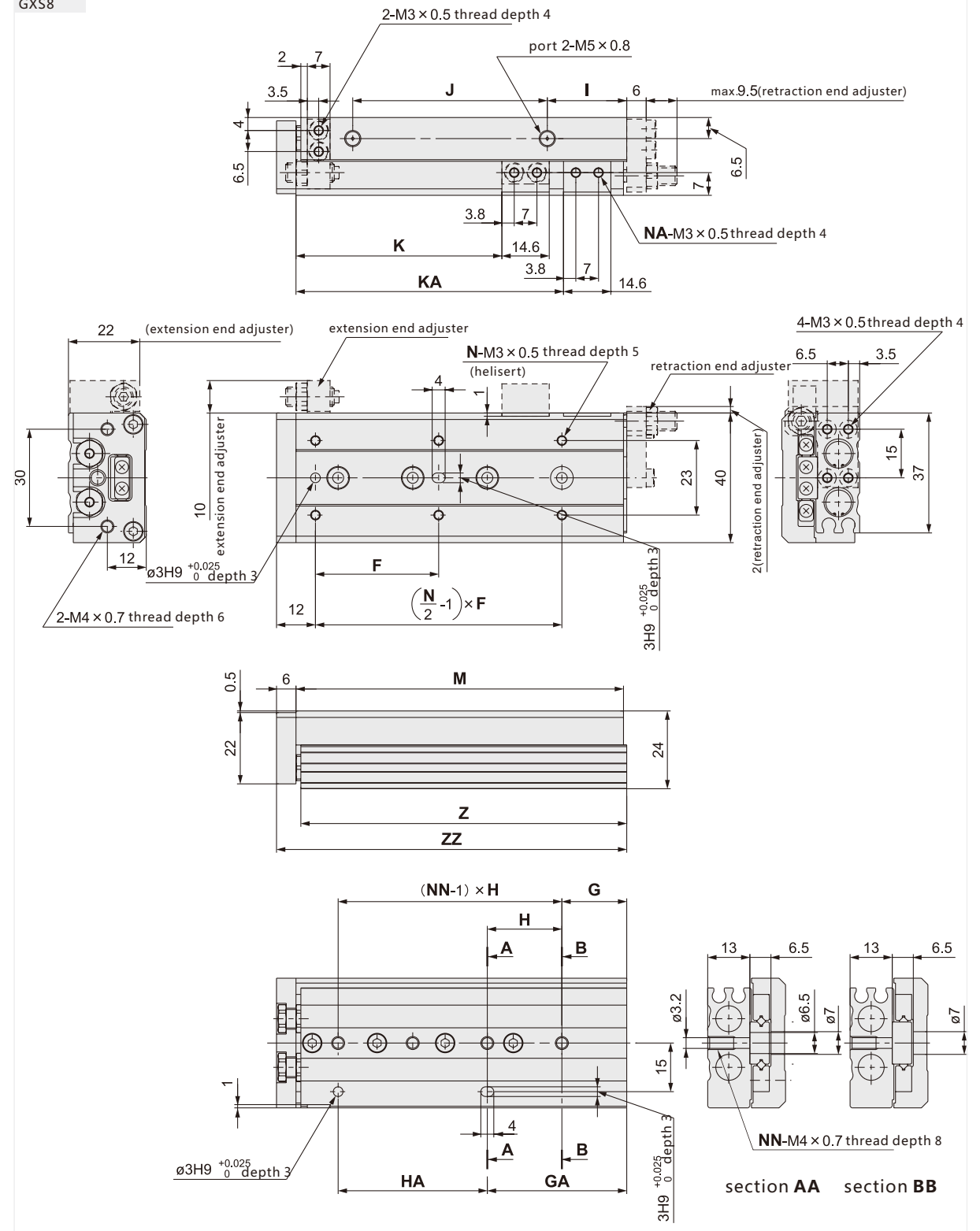
GXS6



Series	F	N	G	H	NN	GA	HA	I	J	K	M	Z	ZZ
GXS6-10	20	4	6	25	2	11	20	10	17	22.5	42	41.5	48
GXS6-20	30	4	6	35	2	21	20	10	27	32.5	52	51.5	58
GXS6-30	20	6	11	20	3	31	20	7	40	42.5	62	61.5	68
GXS6-40	28	6	13	30	3	43	30	19	50	52.5	84	83.5	90
GXS6-50	38	6	17	24	4	41	48	25	60	62.5	100	99.5	106

■ Dimensions (mm)

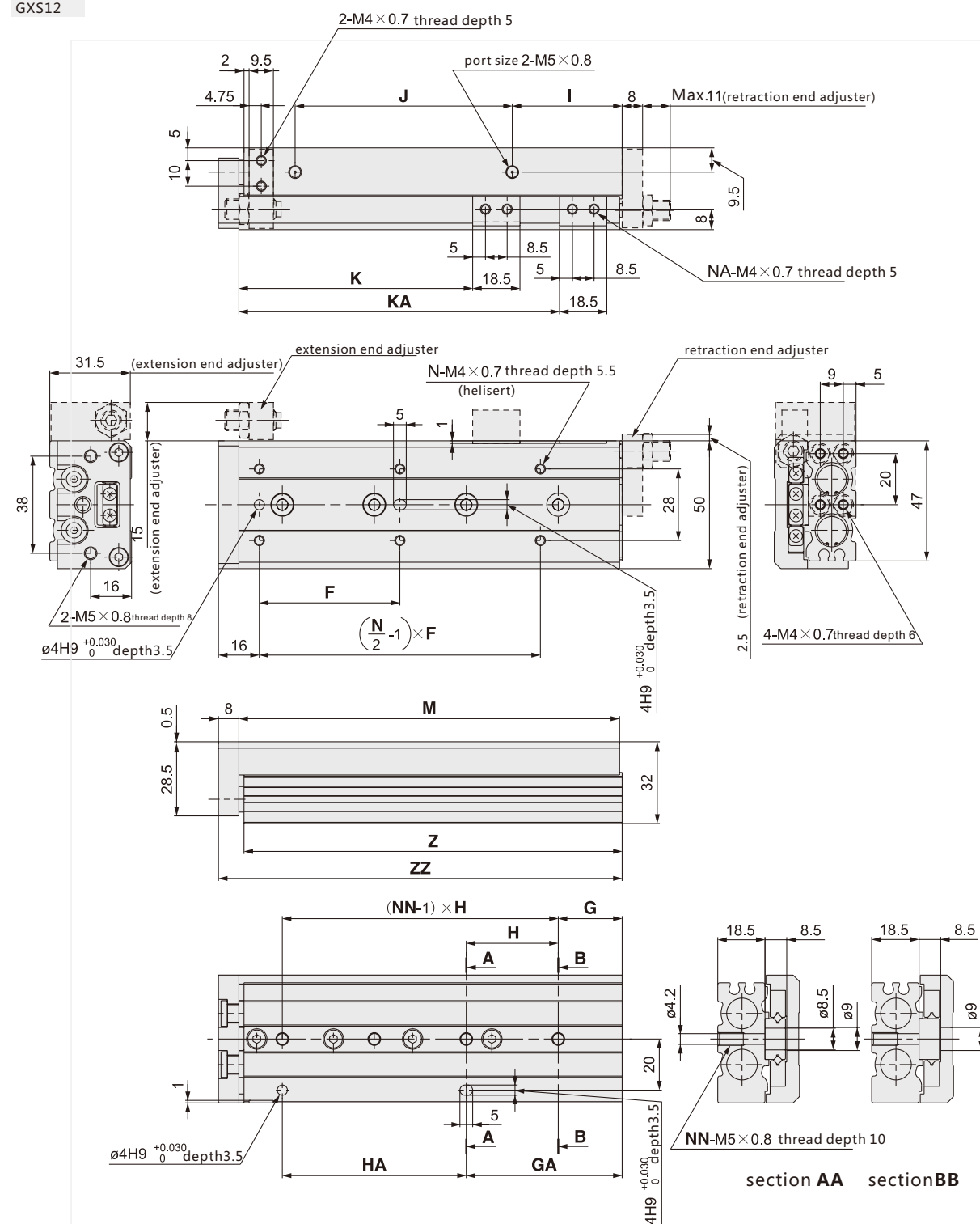
GXS8



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXS8-10	25	4	9	28	2	17	20	13	19.5	23.5	-	2	49	48.5	56
GXS8-20	25	4	12	30	2	12	30	8.5	29	33.5	-	2	54	53.5	61
GXS8-30	40	4	13	20	3	33	20	9.5	39	43.5	-	2	65	64.5	72
GXS8-40	50	4	15	28	3	43	28	10.5	56	53.5	-	2	83	82.5	90
GXS8-50	38	6	20	23	4	43	46	24.5	60	63.5	82.5	4	101	100.5	108
GXS8-75	50	6	27	28	5	83	56	38.5	96	88.5	132.5	4	151	150.5	158

■ Dimensions (mm)

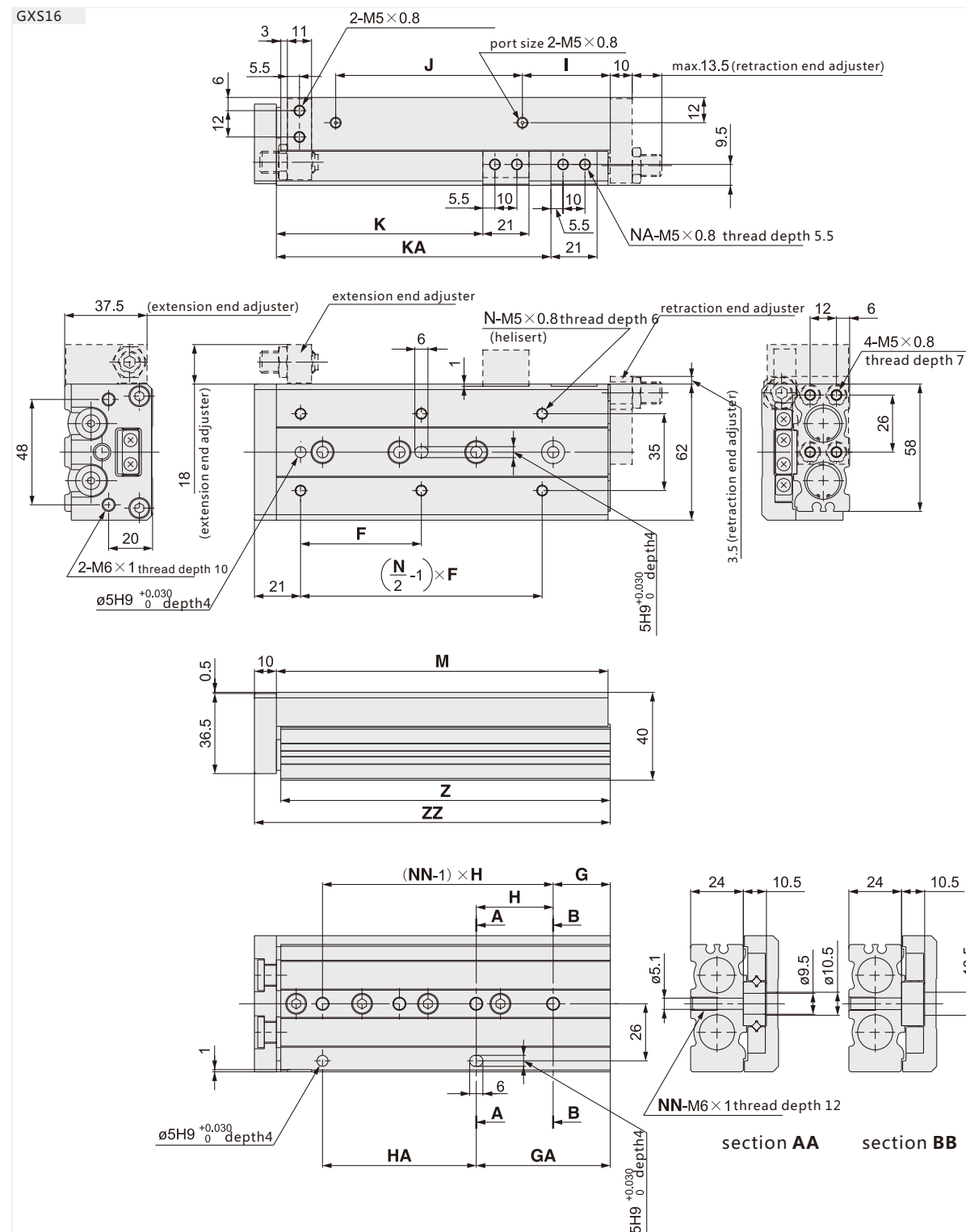
GXS12



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXS12-10	35	4	15	40	2	15	40	10	40	26.5	—	2	71	70	80
GXS12-20	35	4	15	40	2	15	40	10	40	36.5	—	2	71	70	80
GXS12-30	35	4	15	40	2	15	40	10	40	46.5	—	2	71	70	80
GXS12-40	50	4	17	25	3	42	25	10	52	56.5	—	2	83	82	92
GXS12-50	35	6	15	36	3	51	36	22	60	66.5	—	2	103	102	112
GXS12-75	55	6	25	36	4	61	72	43	85	91.5	125.5	4	149	148	158
GXS12-100	65	6	35	38	5	111	76	52	130	116.5	179.5	4	203	202	212

■ Dimensions (mm)

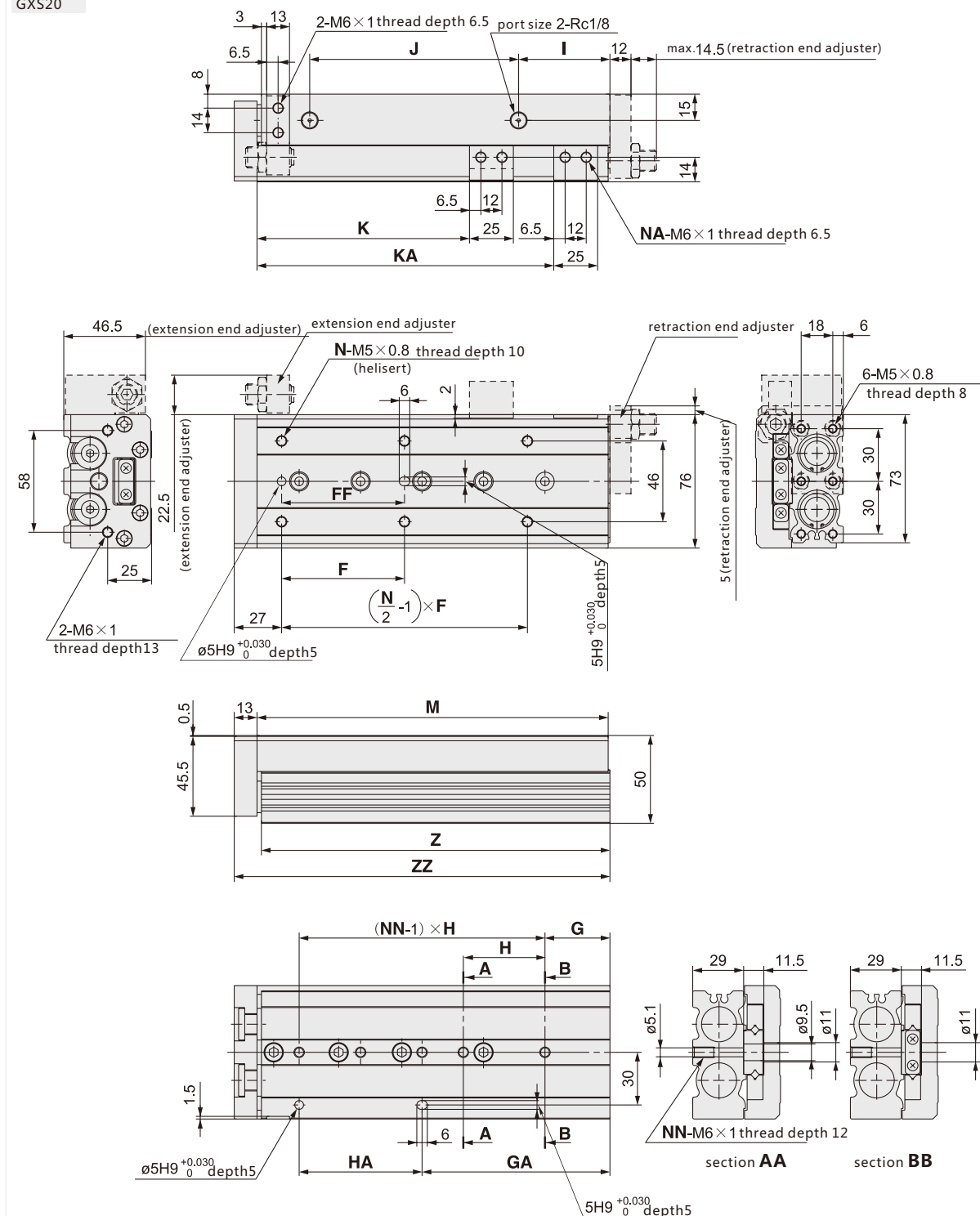
GXS16



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	Z
GXS16-10	35	4	16	40	2	16	40	10	40	29	—	2	76	75	8
GXS16-20	35	4	16	40	2	16	40	10	40	39	—	2	76	75	8
GXS16-30	35	4	16	40	2	16	40	10	40	49	—	2	76	75	8
GXS16-40	40	4	16	50	2	16	50	10	50	59	—	2	86	85	9
GXS16-50	30	6	21	30	3	51	30	15	60	69	101	2	101	100	17
GXS16-75	55	6	26	35	4	61	70	40	85	94	125	4	151	150	16
GXS16-100	65	6	39	35	5	109	70	55	118	119	173	4	199	198	27
GXS16-125	70	8	19	35	7	159	70	68	155	144	223	4	249	248	20

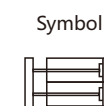
■ Dimensions

GXS20



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXS20-10	50	4	15	45	2	25	35	10	44	31	—	2	83	81.5	97
GXS20-20	50	4	15	45	2	25	35	10	44	41	—	2	83	81.5	97
GXS20-30	50	4	15	45	2	10	44	10	44	51	—	2	83	81.5	97
GXS20-40	60	4	15	55	2	25	35	10	54	61	—	2	93	91.5	107
GXS20-50	35	6	15	35	3	35	35	10	69	71	—	2	108	106.5	122
GXS20-75	60	6	19	35	4	50	35	10	108	96	—	2	147	145.5	161
GXS20-100	70	6	37	35	5	54	70	58	113	121	169	4	200	198.5	214
GXS20-125	70	8	41	38	6	107	70	70	155	146	223	4	254	252.5	268
GXS20-150	80	8	19	44	7	155	76	87	190	171	275	4	306	304.5	320

- Product feature



Small volume, strong, high precision
Combination of cylinder and circular linear guide
parallelism : 30 μ m, Vertical degree : 50 μ m
Double housing design, 2 times output force
With stroke adjuster.

■ Specification

Series	GXQ6	GXQ8	GXQ12	GXQ16	GXQ20
Bore	Φ6x2(same toΦ8)	Φ8x2(same toΦ11)	Φ12x2(same toΦ17)	Φ16x2(same toΦ22)	Φ20x2(same toΦ25)
Fluid	Compressed air				
Action	Double acting				
Max. pressure	0.7MPa				
Min. pressure	0.15MPa				
Ambient and fluid temp.	-10~+60℃ (No freezing)				
Piston speed	50~500mm/s				
Cushion	Rubber stopper(standard), Shock absorber, Metal stopper				
Lubrication	Non-lube				
Port size	M5x0.8				Rc1/8

■ Stroke/Auto switch type

[illegible]

■ Ordering code

GXQ 12 - 50 AS

Bore	
6	Ø6
8	Ø8
12	Ø12
16	Ø16
20	Ø20

Stroke

Adjuster option

Adjuster option

	Null	Without
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	AS	Extension
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	AT	Retraction
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A	Double e
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BS	Extension
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BS	Extension
BT	Retraction

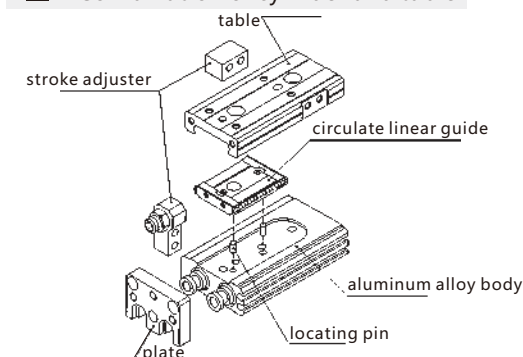
B1	Retraction
B	Double c

D	Double e
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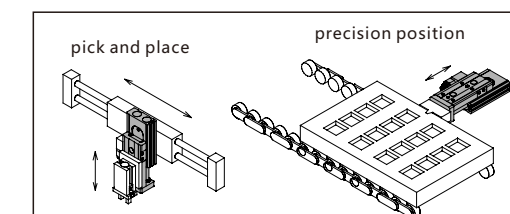
nder and table

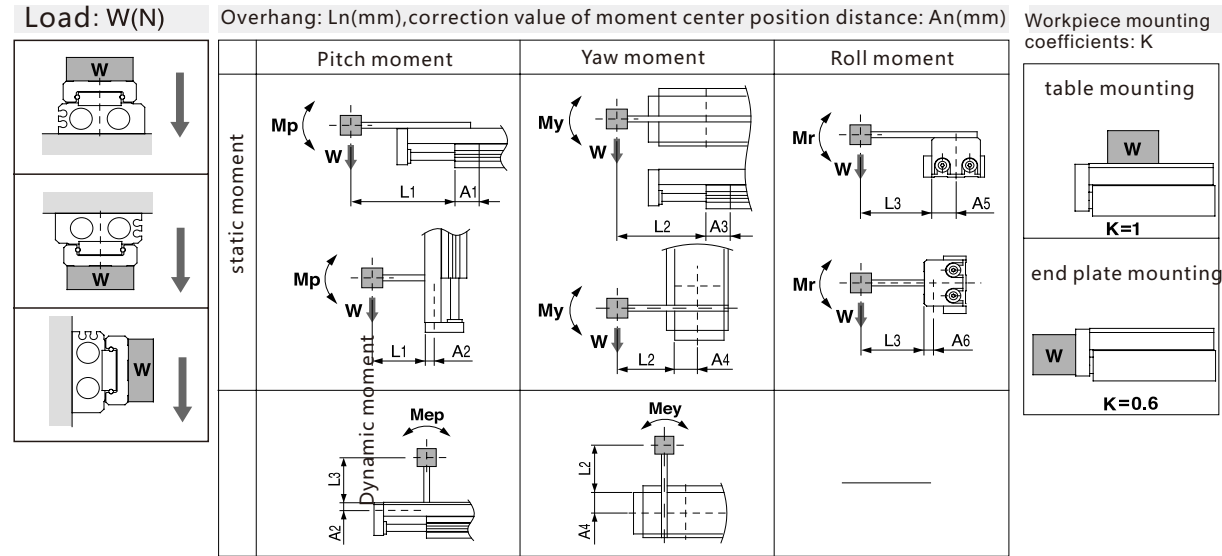
Note: B, BT, BS option not for Ø6, Ø8.

- Combination of cylinder and table



■ Application samples





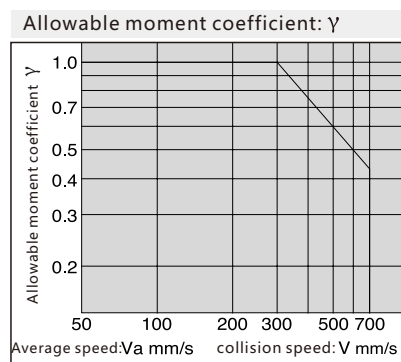
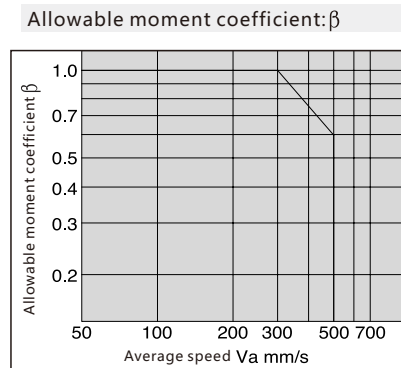
Max. allowable kinetic energy: Emax(J)					Max. allowable load mass: Wmax(N)	
Series	Allowable kinetic energy	Allowable kinetic energy			Series	Max. load
		Rubber bumper	Shock absorber	Metal stopper		
GXQ 6	0.018	0.018	—	0.009	GXQ 6	6
GXQ 8	0.027	0.027	0.054	0.013	GXQ 8	10
GXQ12	0.055	0.055	0.11	0.027	GXQ12	20
GXQ16	0.11	0.11	0.22	0.055	GXQ16	40
GXQ20	0.16	0.16	0.32	0.080	GXQ20	60

Correction value of moment center position distance: An(mm)													
Series	Correction value of moment center position distance									A2	A4	A5	A6
	A1, A3												
	Stroke (mm)												
	10	20	30	40	50	75	100	125	150				
GXQ 6	14.5	14.5	14.5	18.5	18.5	—	—	—	—	6	13.5	13.5	6
GXQ 8	16.5	16.5	18.5	20.5	28	28.5	—	—	—	7	16	16	7
GXQ12	21	21	21	25	25	34	34	—	—	9	19.5	19.5	9
GXQ16	27	27	27	27	30	33	42.5	42.5	—	10.5	24.5	24.5	10.5
GXQ20	29.5	29.5	29.5	29.5	33.5	37.5	53.5	55	56.5	14	30	30	14

note: stroke would not influence correction value A2, A4, A5, A6

Max. allowable moment: Mmax(N.m)																
series	moment1/moment2 : Mpmx/Mymx								moment3 : Mrmx							
	Stroke(mm)								Stroke(mm)							
	10	20	30	40	50	75	100	125	150	10	20	30	40	50	75	100
GXQ 6	1.4	1.4	1.4	2.8	2.8	—	—	—	—	3.5	3.5	3.5	5.1	5.1	—	—
GXQ 8	2.0	2.0	2.8	3.7	7.9	7.9	—	—	—	5.1	5.1	6.0	6.9	7.4	—	—
GXQ12	4.7	4.7	4.7	7.2	7.2	15	15	—	—	11	11	11	13	13	14	—
GXQ16	13	13	13	13	18	23	42	42	—	31	31	31	31	36	41	41
GXQ20	19	19	19	19	27	36	84	84	84	47	47	47	47	57	66	75

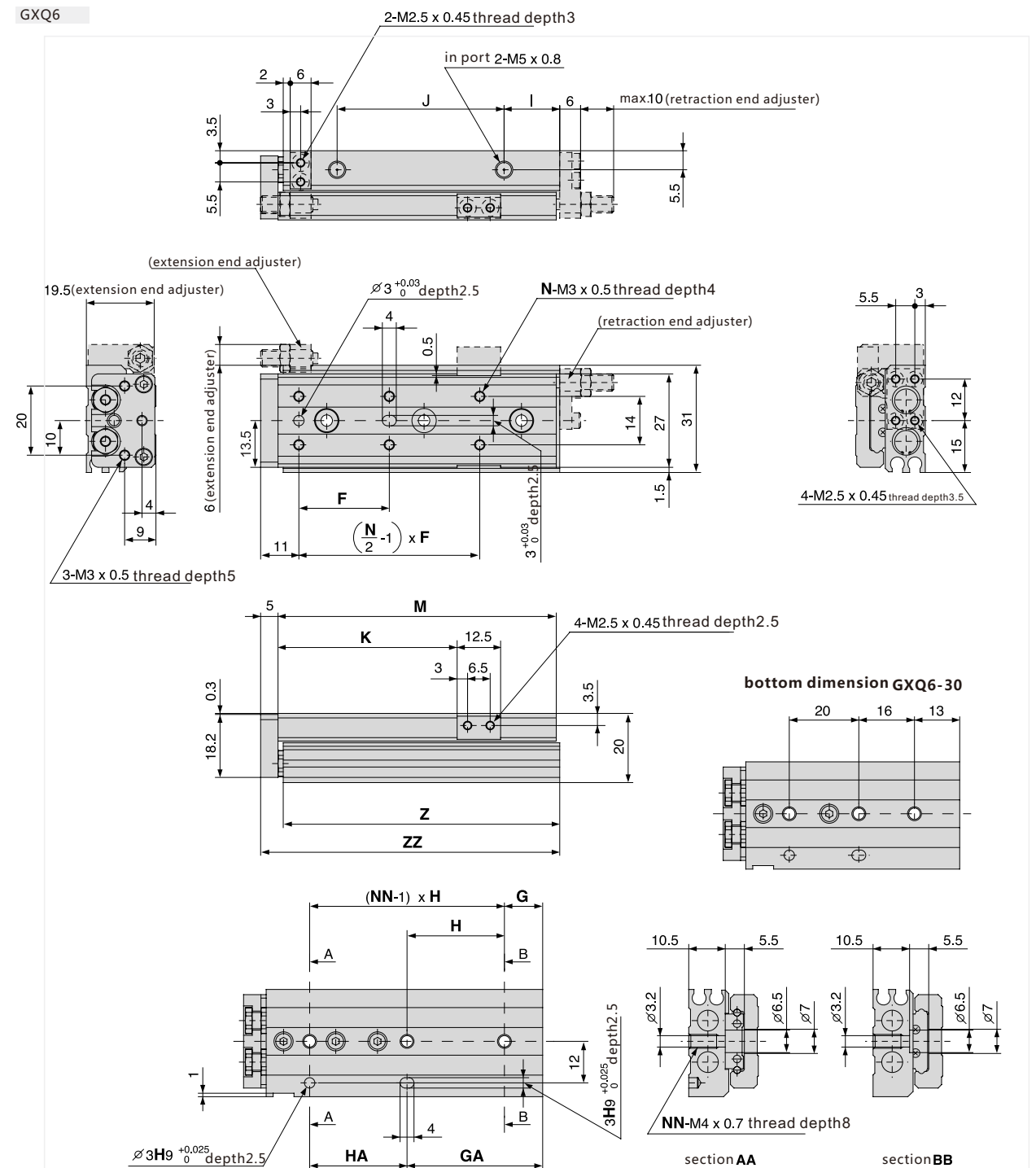
Symbol	Definition	unit
An(n=1~6)	Correction value of moment center position distance	mm
E	Kinetic energy	J
Emax	Max. allowable kinetic energy	J
Ln(n=1~3)	Overhang	mm
M(Mp,My,Mr)	Static moment (Pitch, Yaw, Roll)	N·m
Ma(Map,May,Mar)	Allowable static moment (Pitch, Yaw, Roll)	N·m
Me(Mep,Mey)	Dynamic moment (Pitch, Yaw)	N·m
Mea(Meap,Meay)	Allowable dynamic moment (Pitch, Yaw)	N·m
Mmax(Mpmx,Mymx,Mrmx)	Max. allowable moment (Pitch, Yaw, Roll)	N·m
V	Collision speed	mm/s



note) use the average speed when static moment
use the collision speed when dynamic moment

Symbol	Definition	unit
V_a	Average speed	mm/s
W	Load mass	N
W_a	Allowable load mass	N
W_e	Mass equivalent to impact	N
W_{max}	Max. allowable load mass	N
α	Load factor	-
β	Allowable load mass coefficient	-
γ	Allowable moment coefficient	-
K	Workpiece mounting coefficient	-

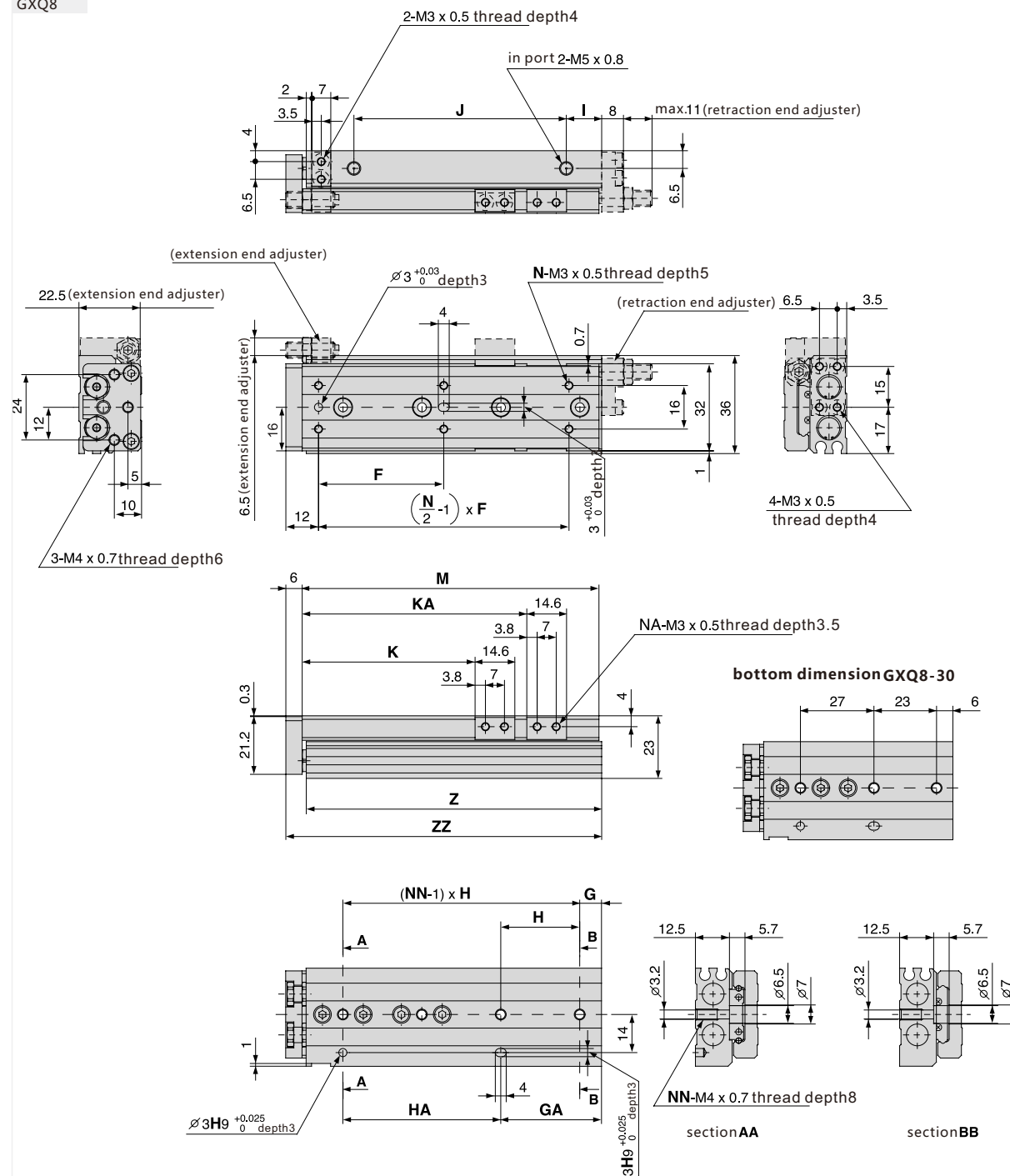
Dimensions (mm)



Series	F	N	G	H	NN	GA	HA	I	J	K	M
GXQ6-10	22	4	6	23	2	13	16	9	17	21.5	42
GXQ6-20	25	4	13	26	2	13	26	9	27	31.5	52
GXQ6-30	21	6	—	—	3	29	20	9	37	41.5	62
GXQ6-40	26	6	11	28	3	39	28	16	48	51.5	80
GXQ6-50	27	6	21	28	3	49	28	9	65	61.5	90

■ Dimensions (mm)

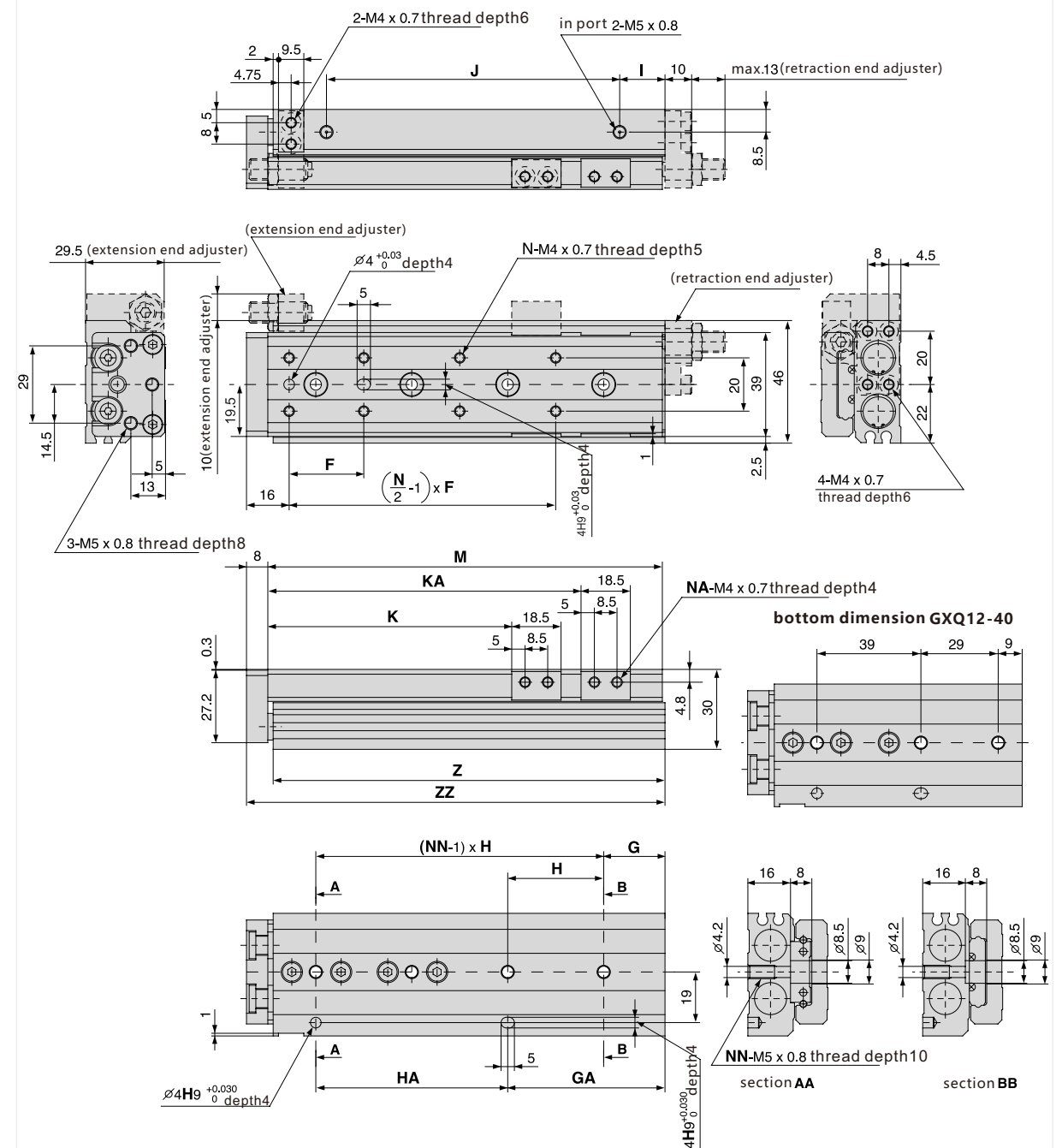
GXQ8



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXQ8-10	25	4	7	25	2	13	19	11	17	23.5	—	4	46	45.5	53
GXQ8-20	25	4	14	28	2	14	28	10	28	33.5	—	4	56	55.5	63
GXQ8-30	26	6	—	—	3	29	27	12	40	43.5	—	4	70	69.5	77
GXQ8-40	32	6	8	31	3	39	31	14	52	53.5	—	4	84	83.5	91
GXQ8-50	46	6	8	29	4	37	58	13	78	63.5	82.5	8	109	108.5	116
GXQ8-75	50	6	31	30	4	61	60	12	105	88.5	112.5	8	135	134.5	142

■ Dimensions (mm)

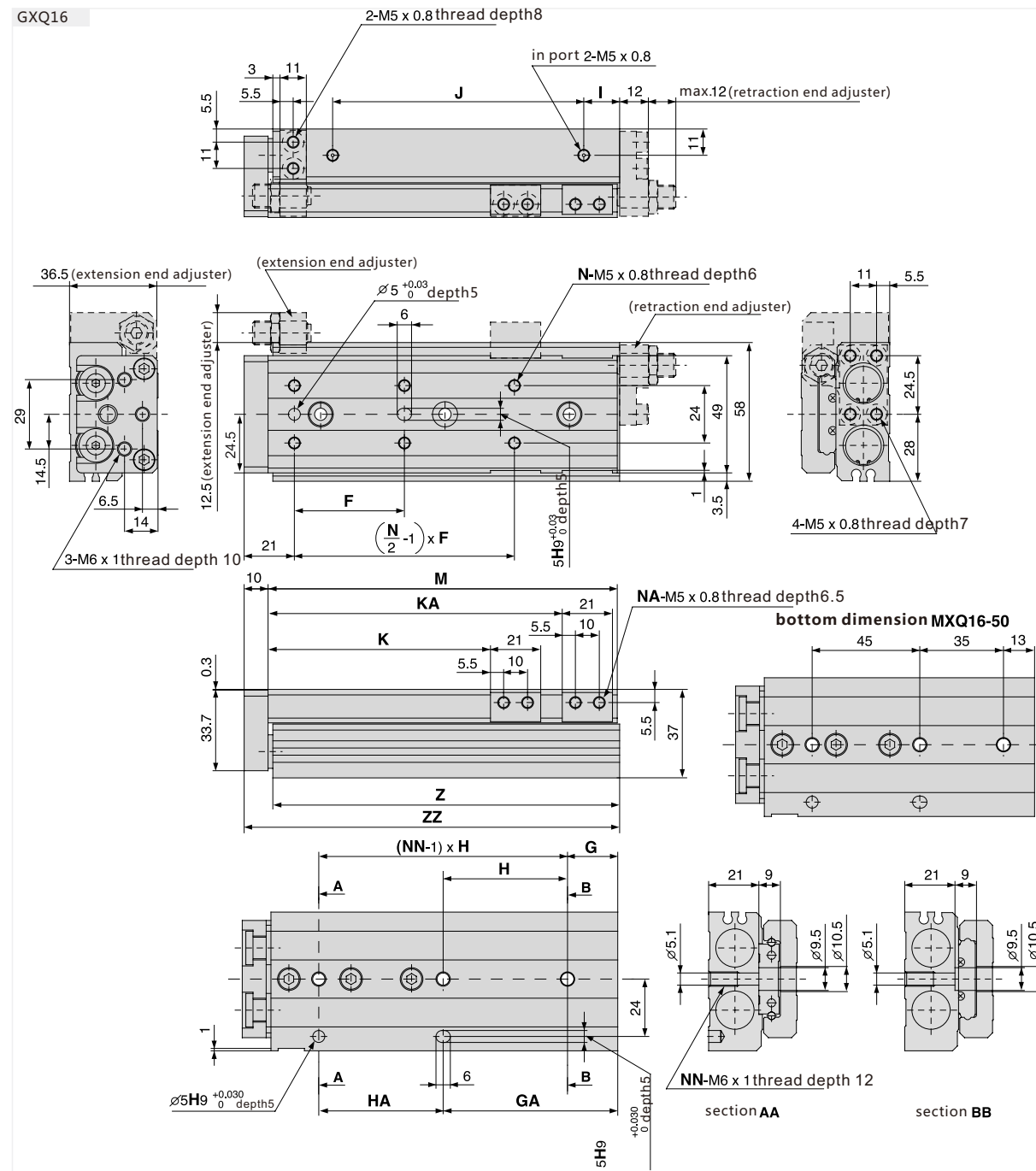
GXQ12



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXQ12-10	28	4	18	32	2	18	32	12	34	26.5	—	4	67	66	76
GXQ12-20	28	4	18	32	2	18	32	12	34	36.5	—	4	67	66	76
GXQ12-30	38	4	20	40	2	20	40	14	42	46.5	—	4	77	76	86
GXQ12-40	34	6	—	—	3	38	39	15	58	56.5	—	4	94	93	103
GXQ12-50	34	6	9	39	3	48	39	13	70	66.5	—	4	104	103	113
GXQ12-75	36	8	23	36	4	59	72	17	110	91.5	117.5	8	148	147	157
GXQ12-100	36	10	12	36	5	84	72	17	135	116.5	142.5	8	173	172	182

■ Dimensions (mm)

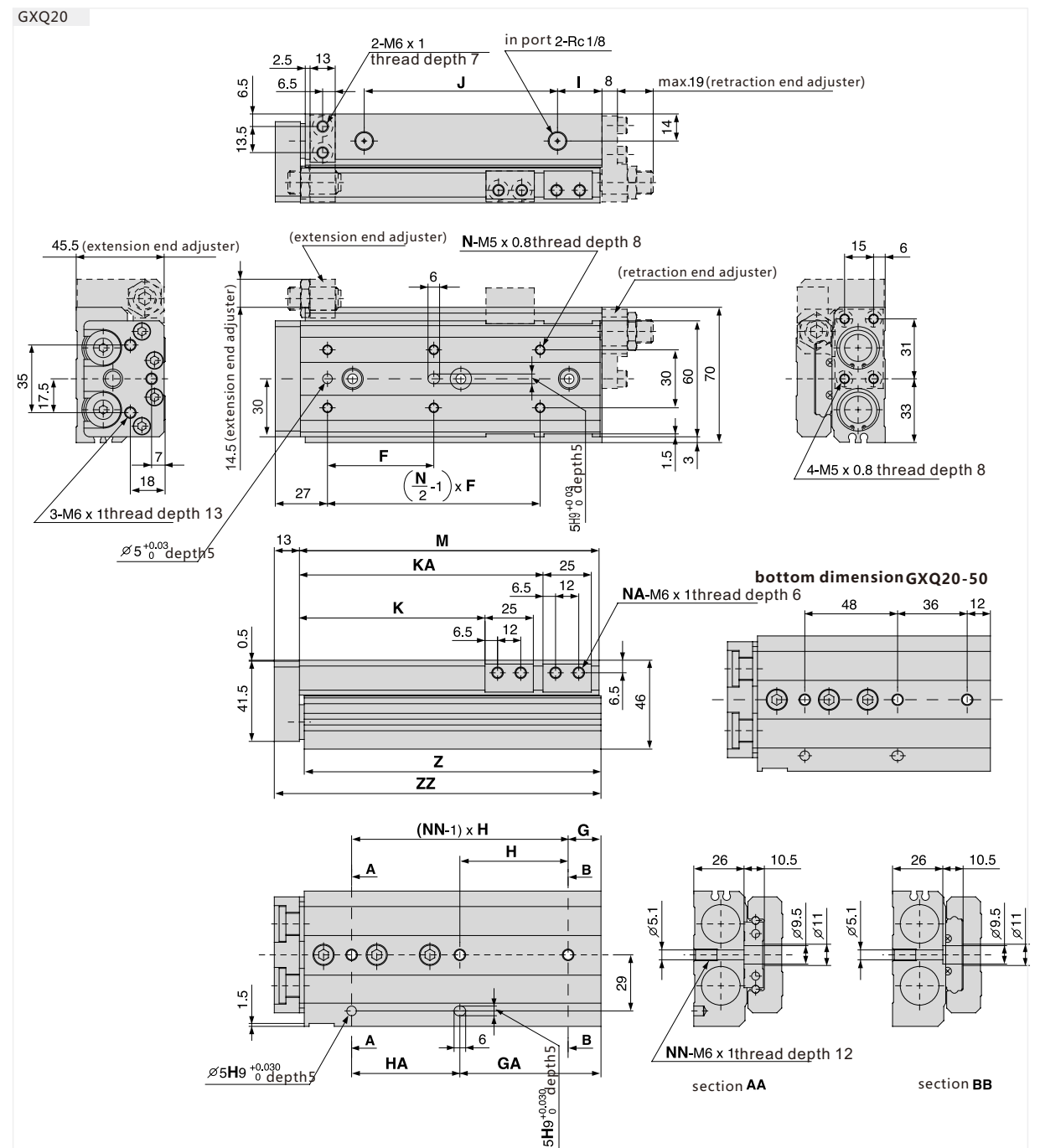
GXQ16



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXQ16-10	38	4	18	39	2	18	39	12	40	28	—	4	78	77	89
GXQ16-20	38	4	18	39	2	18	39	12	40	38	—	4	78	77	89
GXQ16-30	48	4	19	48	2	19	48	12	50	48	—	4	88	87	99
GXQ16-40	58	4	19	58	2	19	58	12	60	58	—	4	98	97	109
GXQ16-50	40	6	—	—	3	48	45	20	68	68	91	8	114	113	125
GXQ16-75	46	6	21	52	3	73	52	15	105	93	123	8	146	145	157
GXQ16-100	44	8	36	44	4	80	88	18	145	118	166	8	189	188	200
GXQ16-125	44	10	17	44	5	105	88	23	165	143	191	8	214	213	225

■ Dimensions (mm)

GXQ20



Series	F	N	G	H	NN	GA	HA	I	J	K	KA	NA	M	Z	ZZ
GXQ20-10	45	4	22	46	2	18	50	16	46	31	—	4	94	92.5	108
GXQ20-20	40	4	22	46	2	18	50	16	46	41	—	4	94	92.5	108
GXQ20-30	48	4	22	46	2	18	50	16	46	51	—	4	94	92.5	108
GXQ20-40	58	4	22	56	2	22	56	16	56	61	—	4	104	102.5	118
GXQ20-50	42	6	—	—	3	48	48	18	72	71	—	4	122	120.5	136
GXQ20-75	55	6	17	56	3	73	56	23	100	96	126	8	155	153.5	169
GXQ20-100	50	8	18	56	4	74	112	25	155	121	183	8	212	210.5	226
GXQ20-125	55	8	37	59	4	96	118	18	190	146	211	8	240	238.5	254
GXQ20-150	62	8	56	62	4	118	124	21	215	171	239	8	268	266.5	282