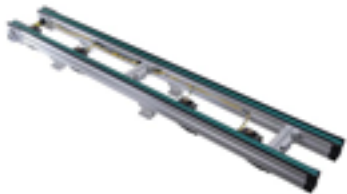


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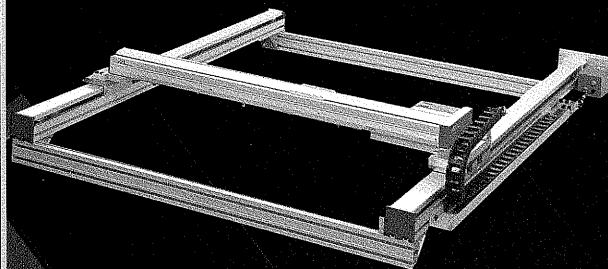
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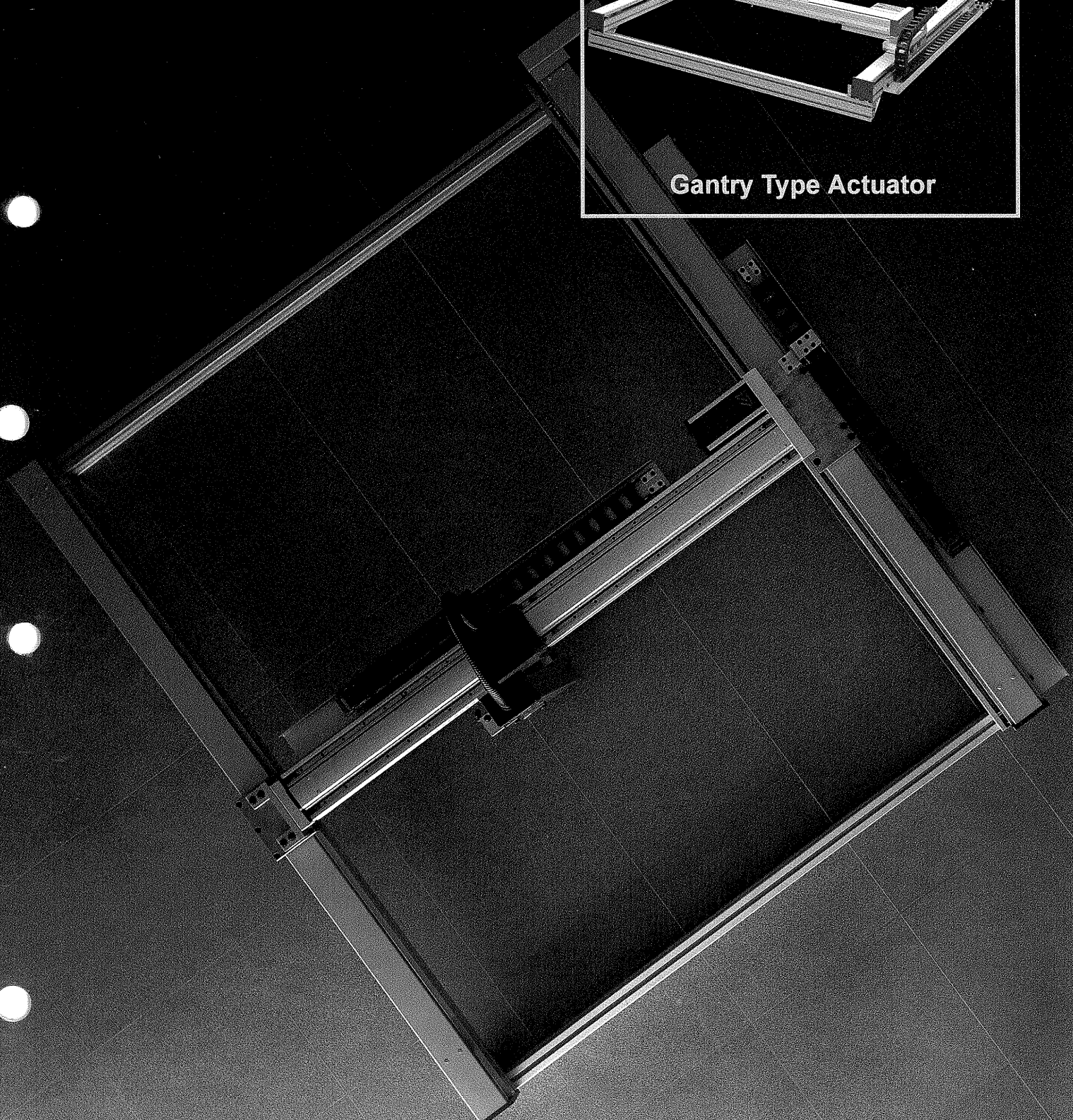
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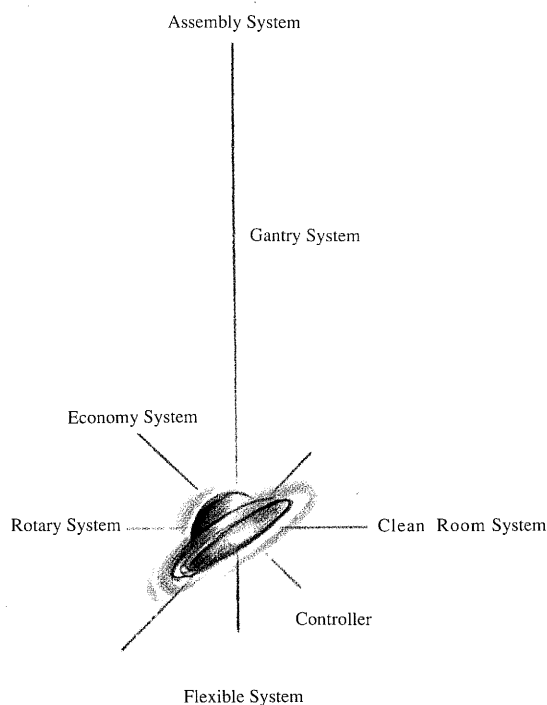
GTYPE

Gantry System Series



Gantry Type Actuator



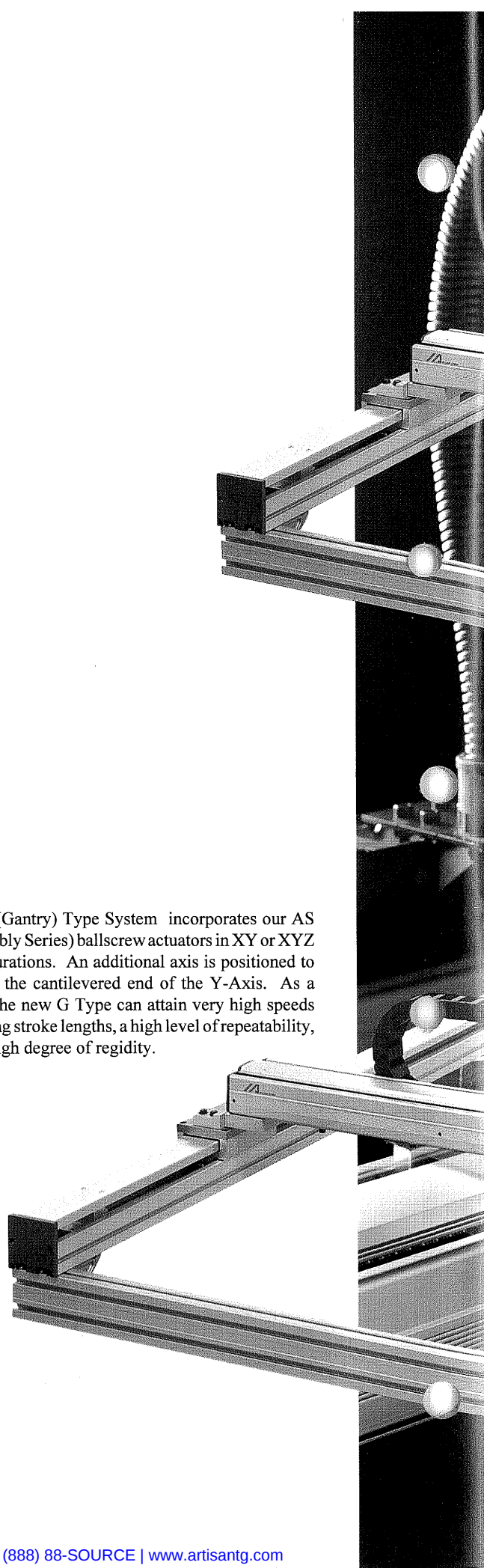


G TYPE

Gantry System Series

- Solution for Long-Stroke Configurations
- Highly Rigid and Accurate Positioning System

The G (Gantry) Type System incorporates our AS (Assembly Series) ballscrew actuators in XY or XYZ Configurations. An additional axis is positioned to support the cantilevered end of the Y-Axis. As a result, the new G Type can attain very high speeds with long stroke lengths, a high level of repeatability, and a high degree of rigidity.



GT-20 (2-Axis System)

X Axis (Drive Axis) : 12GS-200-1500

X Axis (Guide Axis) : 12GS-0-1500

Y Axis : 12R2-60-1200

GT-31S (3-Axis System)

X Axis (Drive Axis) : 12GS-200-1500

X Axis (Guide Axis) : 12GS-0-1500

Y Axis : 12R2-60-1200

Z Axis : 12G2-35-300

(Fixed-Slider Type: With Air Balancer & Brake)

Features

- With an additional supporting axis (X-Axis Guide Module), the G (Gantry) Type offers a maximum Y-Axis overhang length of 1,200mm, and a maximum Y-Axis payload of 30kg (66 lbs.)
- Repeatability: +/- 0.02mm (+/- 0.0008")
- Dependable Thrust Load, High Degree of Overall Rigidity, and Stabilized Lead Error.
- For use in applications utilizing PATH/Arc/CIRCULAR Interpolation.
- Models available in DC or AC Servo Motor Versions
- AS (Assembly Series) 12G2, 12R2 and 12AR models can be used as the Z-Axis (Vertical) in a 3-Axis Configuration.
- The Z-Axis (Fixed-Slider Type) comes equipped with an air-balancer and a brake. (A brake is recommended when using a Z-Axis.)

Model

AS - DC - GT32 - S - 1500, 1200, 600

1 2 3 4 5

1 Series

AS : Assembly System

2 Motor Type

DC : DC Servo Motor

AC : AC Servo Motor

3 Type

Gantry Type

2-Axis System: GT20

3-Axis System: GT31: Z-Axis AS-DC-12G2-35

AS-AC-12G2-50

GT32: Z-Axis AS-DC-12G2-60

AS-AC-12G-100

GT33: Z-Axis AS-DC-12R2-60

GT34: Z-Axis AS-DC-12R2-100

AS-AC-12R2-100

GT35: Z-Axis AS-DC-12R-60

AS-AC-12AR-100

4 Z-Axis Mounting Method

S: Fixed-Slider Type

(Standard Accessory: Air-Balancer and Brake)

B: Fixed-Base Type

5 Stroke Length

X-Axis: 1500mm Y-Axis: 1200mm

Z-Axis: 600mm

AS Gantry Type Structure

DC Servo Motor Specifications

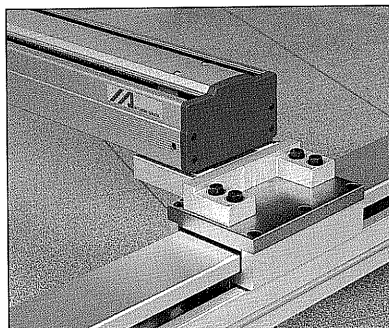
Series	Motor	# of Axis	Type	Maximum Stroke Length	
AS	DC	2-Axis	GT20	1500, 1200	
		3-Axis	GT31S	1500, 1200, 400	Z-Axis Fixed Slider
			GT32S	1500, 1200, 600	
			GT33S	1500, 1200, 600	
			GT34S	1500, 1200, 600	
			GT31B	1500, 1200, 400	Z-Axis Fixed Base
			GT32B	1500, 1200, 600	
			GT33B	1500, 1200, 600	
			GT34B	1500, 1200, 600	
			GT35B	1500, 1200, 200	

*An Air-Balancer and a Brake are standard accessories on the Z-Axis, Fixed-Slider-Type.

AC Servo Motor Specifications

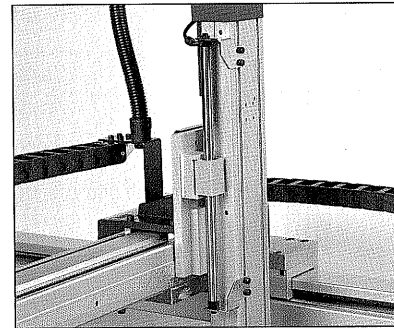
Series	Motor	# of Axis	Type	Maximum Stroke Length	
AS	AC	2-Axis	GT20	1500, 1200	
		3-Axis	GT31S	1500, 1200, 400	Z-Axis Fixed Slider
			GT32S	1500, 1200, 600	
			GT34S	1500, 1200, 600	
			GT31B	1500, 1200, 400	Z-Axis Fixed Base
			GT32B	1500, 1200, 600	
			GT34B	1500, 1200, 600	
			GT35B	1500, 1200, 200	

*An Air-Balancer and a Brake are standard accessories on the Z-Axis, Fixed-Slider-Type.



Pin Bracket

Pin Bracket between the X-Axis Guide Module and the Y-Axis helps correct installation error and stabilizes operation.



Air-Balancer

(Z-Axis Fixed-Slider Type)

Air-balancing the vertical Z-Axis with a compact rodless-cylinder.

Y-Axis Payload Guidelines For AS-DC(AC)-GT-20 (2-Axis System)

Y-Axis Stroke Length	800mm or less	900mm	1000mm	1100mm	1200mm
Y-Axis Payload	30kg (66 lbs)	28kg (62 lbs)		26kg (57 lbs)	

Z-Axis (3-Axis System) Load Weight Guidelines

• DC Servo Motor System

(Unit: kg)

Z-Axis Mounting	Y Axis StrokeLength (mm) Z-Axis Model	600	700	800	900	1000	1100	1200	Unit Name
Fixed-Slider Type (S)	12G2-35-	100 ~ 400*	6						GT31S
	12G2-60-	200	12		10		8		GT32S
		300	10			8		6	
		400	10			8		6	
		500	8				6	4	
		600	8				6	4	
	12R2-60-	200	12		10		8		GT33S
		300	10			8		6	
		400	10			8		6	
		500	8				6	4	
		600	8				6	4	
	12R2-100-	200	12		10		8		GT34S
		300	10			8		6	
		400	10			8		6	
		500	8				6	4	
		600	8				6	4	
Fixed-Base Type (B)	12G2-35-	100 ~ 400*	6						GT31B
	12G2-60-	200 ~ 600*	8						GT32B
	12R2-60-	200 ~ 600*	8						GT33B
	12R2-100-	200	13						GT34B
		300, 400	13				11		
		500, 600	13		11		9		
	12AR-60-	200	5						GT35B

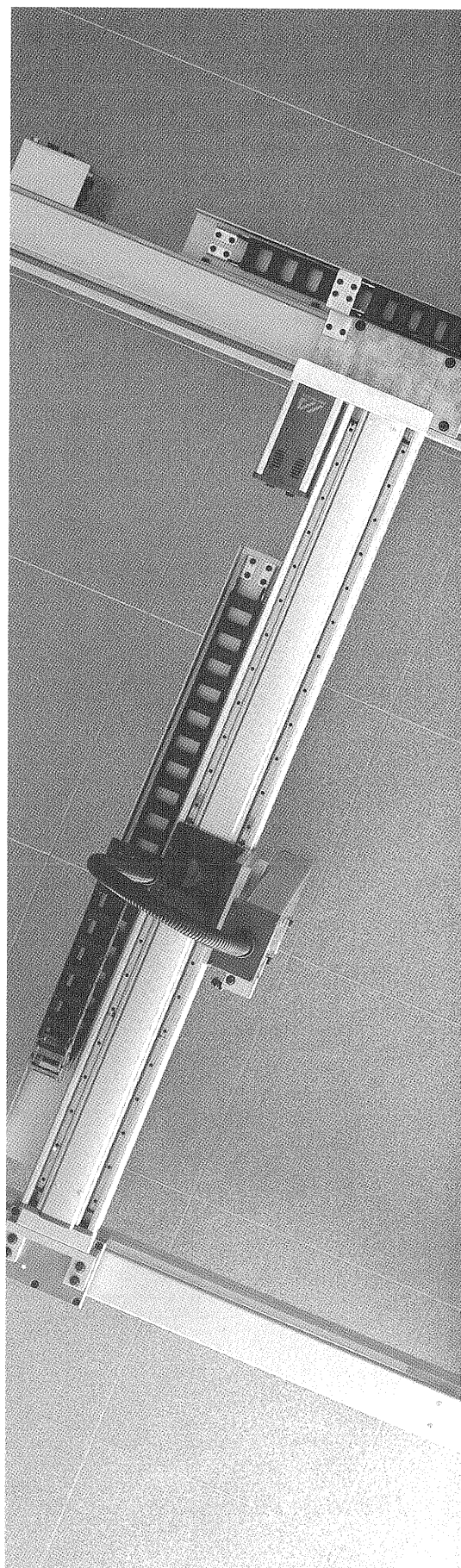
* Stroke Length increment is 100mm. Fixed-Slider-Types comes with standard Air-Balancer and Brake.

• AC Servo Motor System

(Unit: kg)

Z-Axis Mounting	Y-Axis Stroke Length (mm) Z-Axis Model	600	700	800	900	1000	1100	1200	Unit Name
Fixed-Slider Type (S)	12G2-50-	100 ~ 400*	8.5						GT31S
	12G2-100-	200	12		10		8		GT32S
		300	10			8		6	
		400	10			8		6	
		500	8				6	4	
		600	8				6	4	
	12R2-100-	200	12		10		8		GT34S
		300	10			8		6	
		400	10			8		6	
		500	8				6	4	
		600	8				6	4	
Fixed-Base Type (B)	12G2-50-	100 ~ 400*	8.5						GT31B
	12G2-100-	200	13						GT32B
		300, 400	13				11		
		500, 600	13		11		9		
	12R2-100-	200	13						GT34B
		300, 400	13				11		
		500, 600	13		11		9		
	12AR-100-	200	7						GT35B

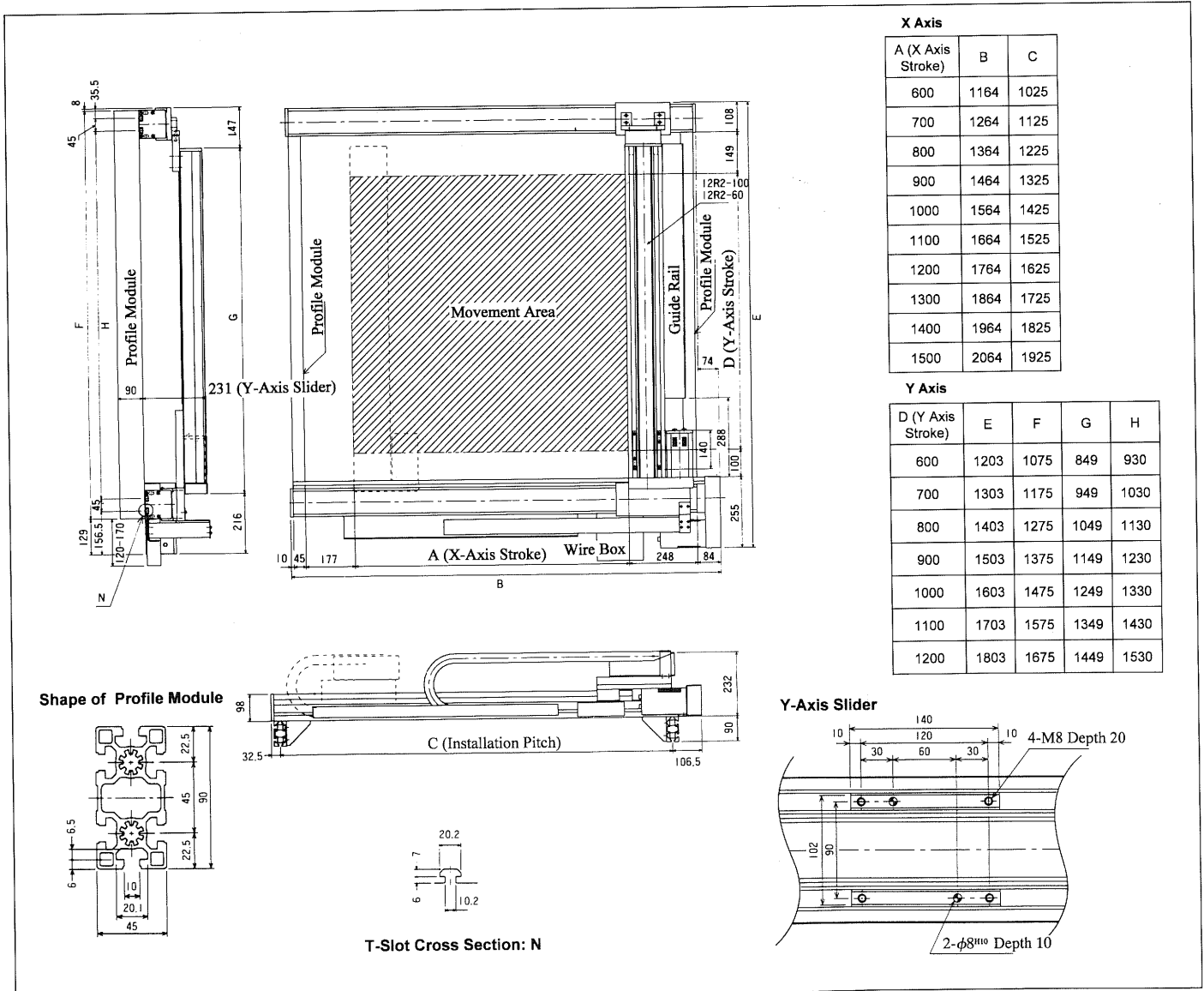
* Stroke Length increment is 100mm. Fixed-Slider-Types comes with standard Air-Balancer and Brake.



2-Axis System

Specifications and Dimensions

Gantry Type X-Y Configuration		X-Axis	Y-Axis	
		12GS-200 (Drive Axis), 12GS-0 (Guide Axis)	AS-DC12R2-60	AS-AC12R2-100
Stroke	mm	600 ~ 1500 (23.6 ~ 59.1")	600 ~ 1200 (23.6 ~ 47.2")	
Rated Output	W	200	60	100
Rated Speed	mm/sec	650 (25.6 in /sec)	400 (15.7 in /sec)	
Rated Thrust	N (kgf)	245 (25)	127 (13)	206 (21)
Repeatability (X, Y)	mm	+/- 0.02 (+/- 0.0008")		
Motor		DC (AC) Servo Motor 200W	DC Servo Motor 60W	AC Servo Motor 100W
Ballscrew		φ20mm, 40mm Lead, Rolled Thread C10, Backlash 0.1mm or less	φ16mm, 16mm Lead, Rolled Thread C10, Backlash 0.1mm or less	
Guide		LM Guide : SR25W-Y2UU	LM Guide: SR15V-2UU	
Motor-Ballscrew Connection		Timing Belt Speed Reduction Ratio 13/40	Timing Belt Speed Reduction Ratio 1/2	
Base		Extruded Aluminum (A6N01-T5 equivalent) White Alumite Treatment	Extruded Aluminum (A6063S-T5) White Alumite Treatment	
Slider		A5052 White Alumite Treatment	Extruded Aluminum (A6063S-T5) White Alumite Treatment	
Maximum Speed	mm/sec	800 (31.5 in/s) [700 (27.6 in/s) for 1200mm Stroke Length, 650 (25.6 in/s) for 1300mm, 550 (22.4 in/s) for 1400mm, and 500 (19.7 in/s) for 1500mm]	500 (20 in/s) [400 (15.7 in/s) for 1000mm Stroke Length, 350 (13.8 in/s) for 1100mm, and 300 (11.8 in/s) for 1200mm]	
Maximum Thrust	N(kgf)	490 (50)	245 (25)	402 (41)



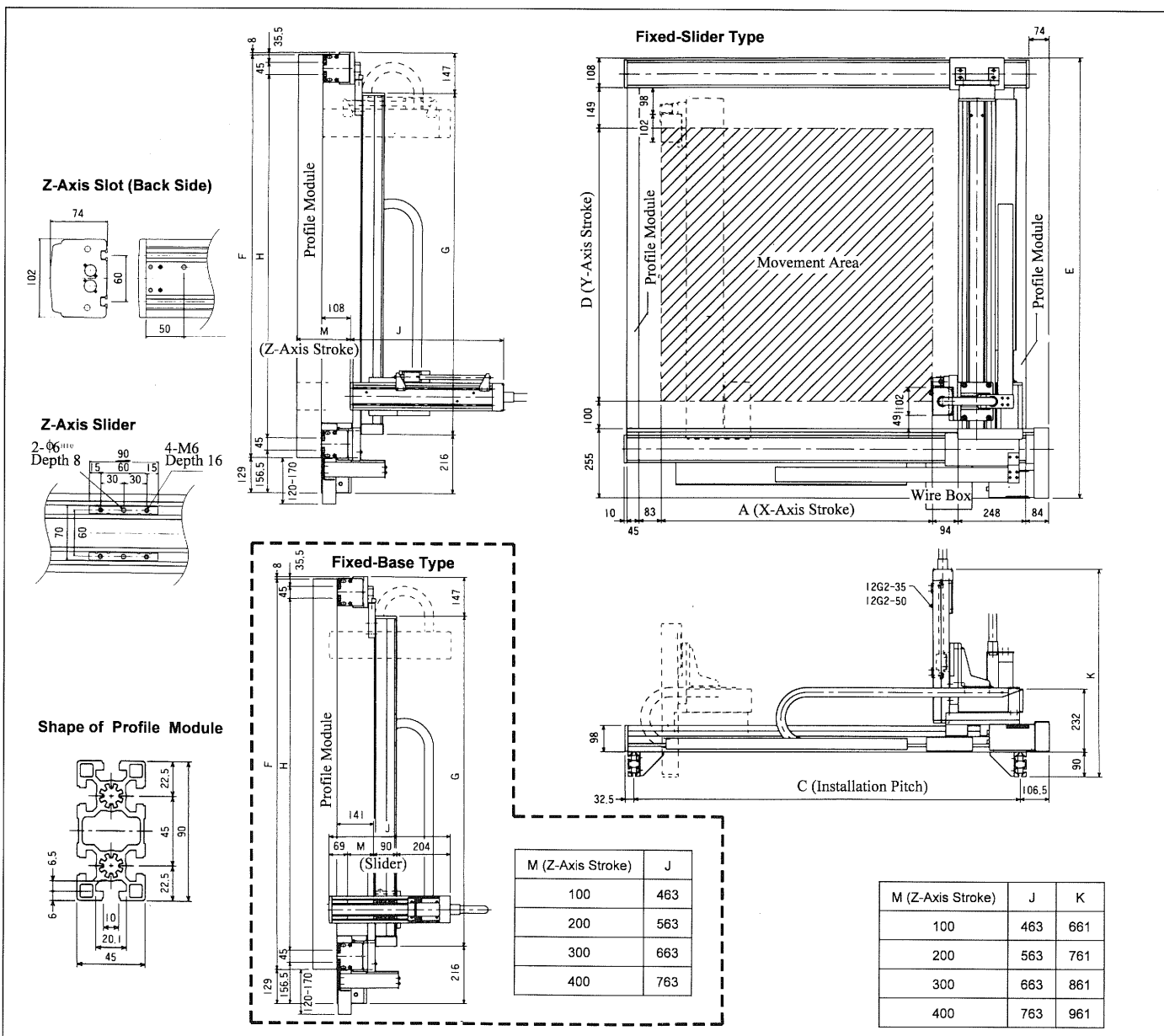
3-Axis System

GT31S(B)

Z-Axis Specifications and Dimensions

Model		AS-DC12G2-35	AS-AC12G2-50
Stroke	mm	100, 200, 300, 400 (3.9", 7.9", 11.8", 15.7")	
Rated Output	W	34	50
Rated Speed	mm/sec	300 (11.8 in.)	
Rated Thrust	N (kgf)	98 (10)	141 (14.4)
Repeatability	mm	±0.02 (±0.0008")	
Motor		DC Servo Motor	AC Servo Motor
Encoder		Attached to Motor	
Ballscrew		φmm, 6mm Lead, Rolled Thread C10, Backlash 0.1mm or less	
Guide		LM Guide: 2RSR12UU 2pcs.	
Motor-Ballscrew Connection		Direct Coupling	
Base		Extruded Aluminum (A6063S-T5) White Alumite Treatment	
Maximum Speed	mm/sec	400 (15.7")	
Maximum Thrust *1	N(kgf)	196 (20)	282 (28.8)

*1 At a Speed of 10mm/sec for 10 seconds.



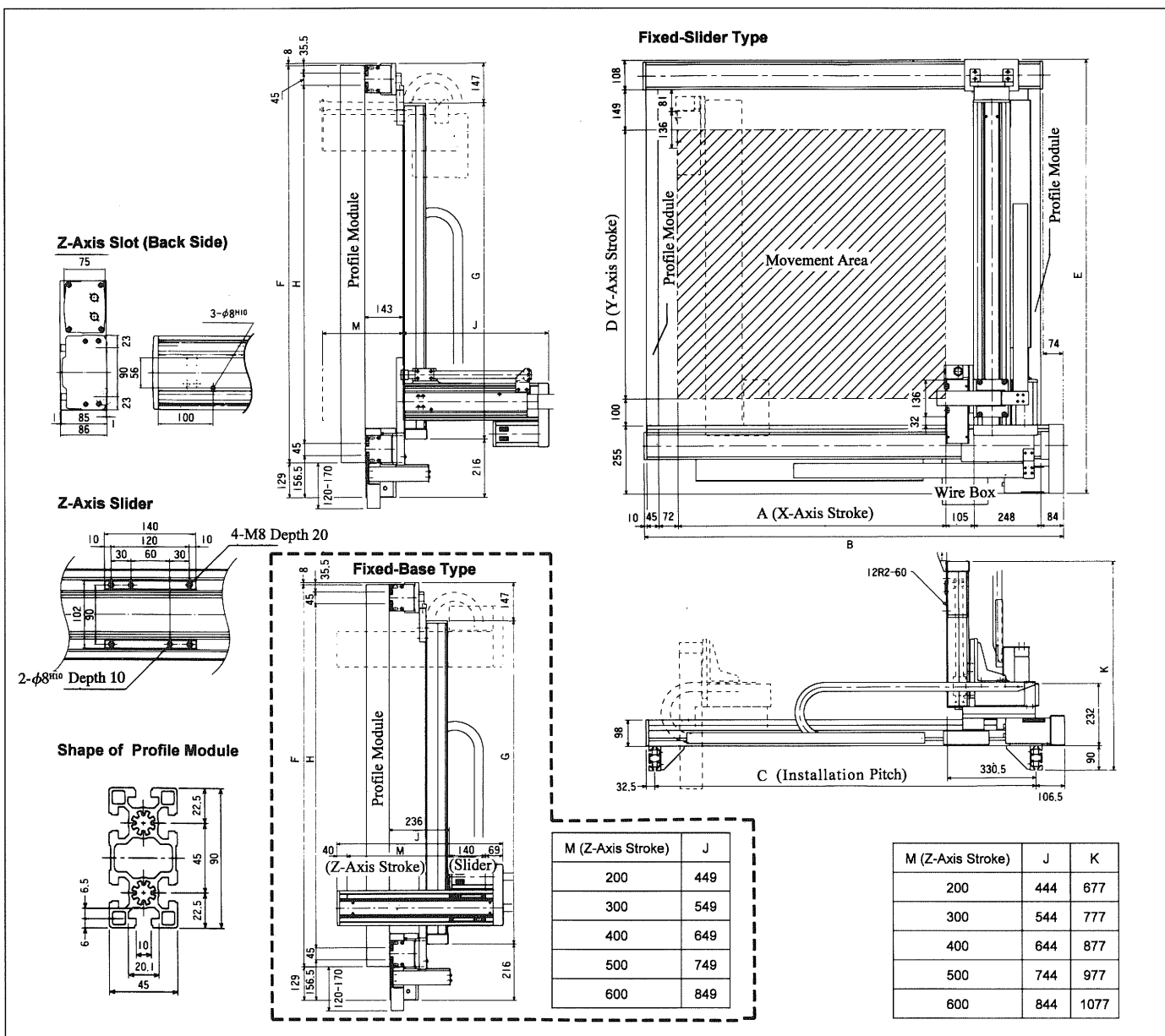
GT33S(B)

3-Axis System

Z-Axis Specifications and Dimensions

Model		AS-DC12R2-60
Stroke *1	mm	200, 300, 400, 500, 600 (7.9", 11.8", 15.7", 19.7", 23.6")
Rated Output	W	60
Rated Speed	mm/sec	400 (15.7 in /sec)
Rated Thrust	N (kgf)	127 (13)
Repeatability	mm	+/- 0.02 (+/- 0.0008")
Motor		DC Servo Motor
Encoder		Attached to Motor
Ballscrew		φ16mm, 16mm Lead, Rolled Thread C10, Backlash 0.1mm or less
Guide		LM Guide: SR-15V2UU 2pcs.
Motor-Ballscrew Connection		Timing belt Speed Reduction Ratio 1/2
Base		Extruded Aluminum (A6063S-T5) White Alumite Treatment
Maximum Speed	mm/sec	500 (19.7 in /sec)
Maximum Thrust *2	N(kgf)	245 (25)

*1 For 600mm Stroke Fixed-Slider Type Actuators, operate at or below 0.2G Acceleration. *2 At a Speed of 10mm/sec for 10 seconds.



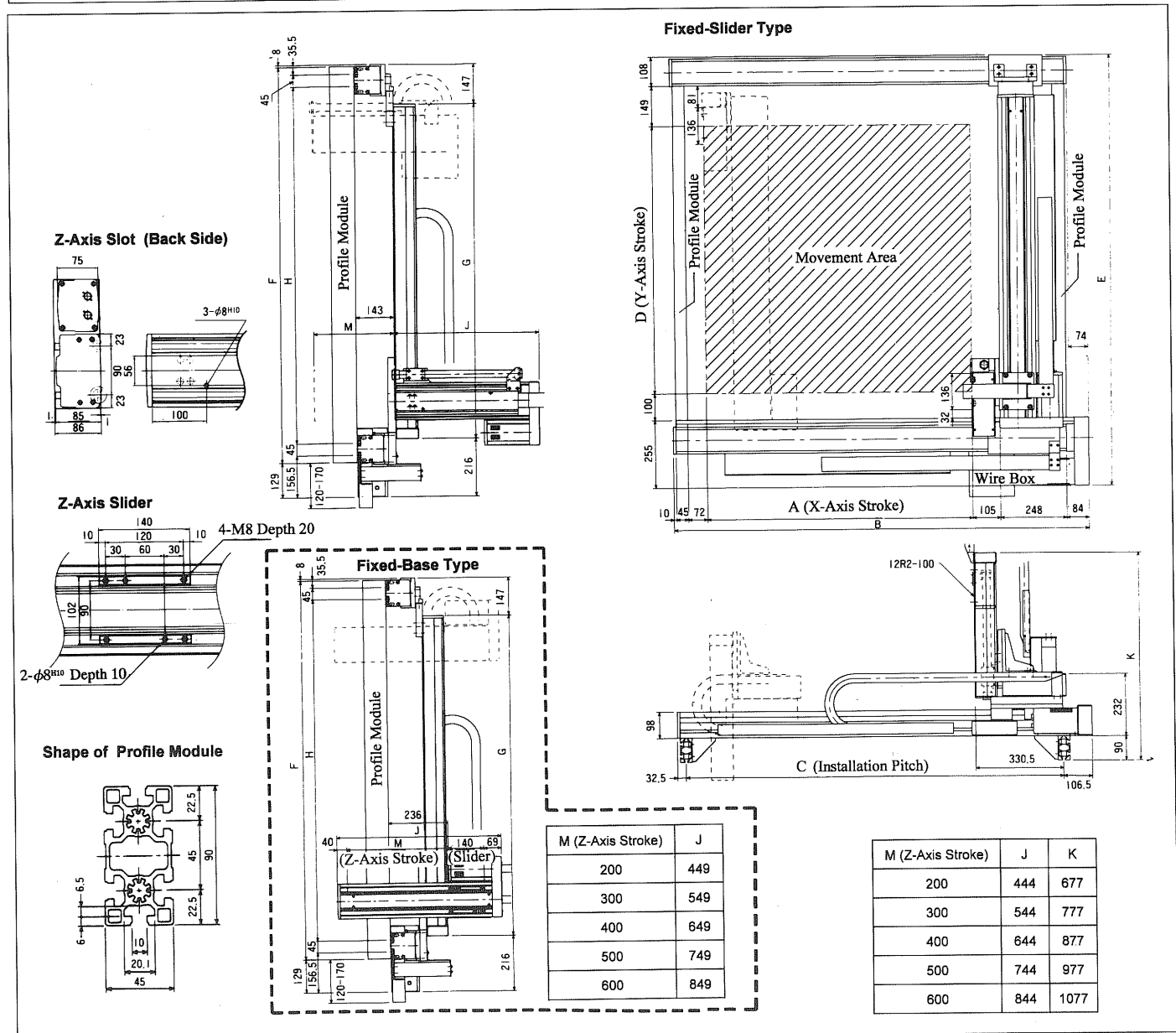
GT34S(B)

3-Axis System

Z-Axis Specifications and Dimensions

Model		AS-DC12R2-100	AS-AC12R2-100
Stroke *1	mm	200, 300, 400, 500, 600 (7.9", 11.8", 15.7", 19.7", 23.6")	
Rated Output	W	100	
Rated Speed	mm/sec	400 (15.7 in /sec)	
Rated Thrust	N (kgf)	206 (21)	
Repeatability	mm	+/- 0.02 (+/- 0.0008")	
Motor		DC Servo Motor	AC Servo Motor
Encoder		Attached to Motor	
Ballscrew		φ16mm, 16mm Lead, Rolled Thread C10, Backlash 0.1mm or less	
Guide		LM Guide: SR-15V2UU 2pcs.	
Motor-Ballscrew Connection		Timing Belt Speed Reduction Ratio 1/2	
Base		Extruded Aluminum (A6063S-T5) White Alumite Treatment	
Maximum Speed	mm/sec	500 (19.7 in /sec)	
Maximum Thrust *2	N(kgf)	402 (41)	

*1 For 600mm Stroke Fixed-Slider Type Actuators, operate at or below 0.2G Acceleration. * 2 At a Speed of 10mm/sec for 10 seconds.





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