

XRL SERIES

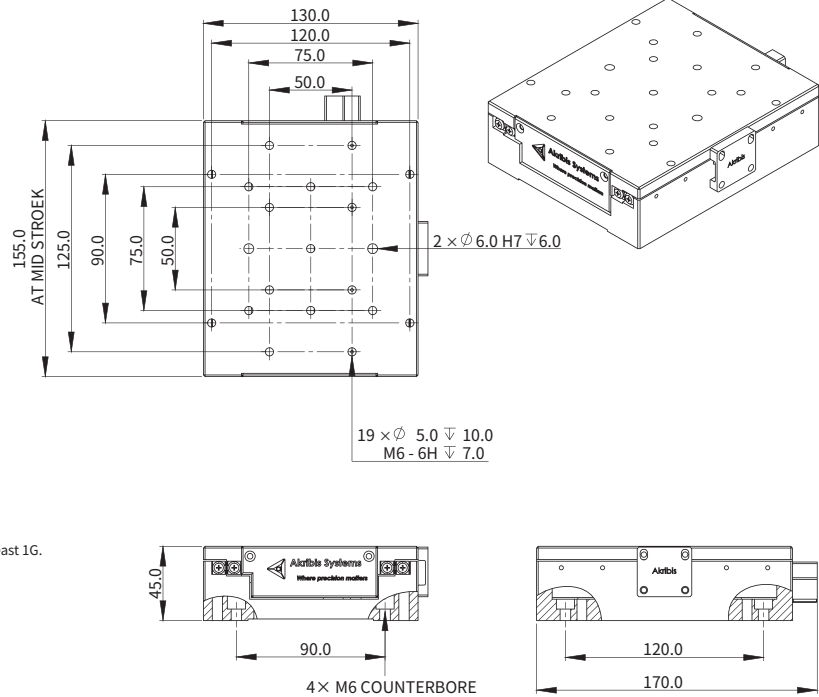
- ▶ Suitable for smooth movement
- ▶ Quick response, Short settling time
- ▶ Low friction
- ▶ High precision

XRL130-35

Specifications	Unit	Value
Effective Stroke	mm	35
Continuous Force	N	26.4
Peak Force	N	132.0
Resolution	μm	QT: 0.1
		TN: SINCOS
Bidirectional Repeatability	μm	QT: ±0.3
		TONIC: ±0.1 (4096X Interpolation)
Straightness	μm	±2.0
Flatness	μm	±2.5
Rated Payload ¹	kg	3.5
No-load Moving Mass	kg	1.2
No-load Total Mass	kg	2.3
Max. Allowable Horizontal Mounting Load	kg	12
Max. Allowable Side Mounting Load	kg	10
Max. Allowable Roll Moment Load	Nm	29.0
Max. Allowable Pitch Moment Load	Nm	29.9
Max. Allowable Yaw Moment Load	Nm	36.3

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing

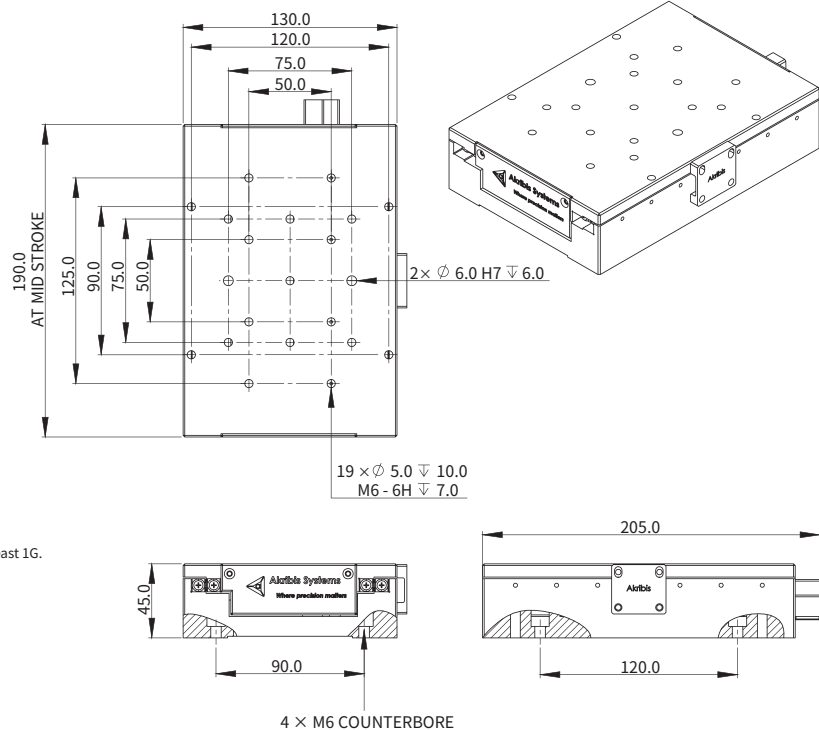


XRL130-60

Specifications	Unit	Value
Effective Stroke	mm	60
Continuous Force	N	26.4
Peak Force	N	132.0
Resolution	μm	QT: 0.1
		TN: SINCOS
Bidirectional Repeatability	μm	QT: ±0.3
		TONIC: ±0.1 (4096X Interpolation)
Straightness	μm	±2.0
Flatness	μm	±2.5
Rated Payload ¹	kg	4
No-load Moving Mass	kg	1.4
No-load Total Mass	kg	2.6
Max. Allowable Horizontal Mounting Load	kg	12
Max. Allowable Side Mounting Load	kg	10
Max. Allowable Roll Moment Load	Nm	35.3
Max. Allowable Pitch Moment Load	Nm	42.7
Max. Allowable Yaw Moment Load	Nm	51.9

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing

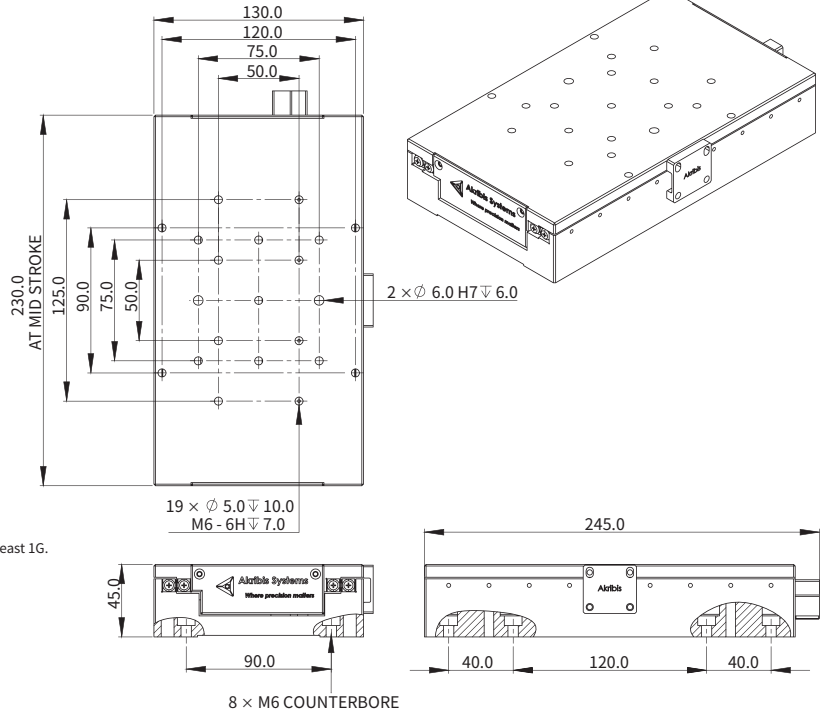


XRL130-110

Specifications	Unit	Value
Effective Stroke	mm	110
Continuous Force	N	26.4
Peak Force	N	132.0
Resolution	μm	QT: 0.1 TN: SINCOS
Bidirectional Repeatability	μm	QT: ±0.3 TONIC: ±0.1 (4096X Interpolation)
Straightness	μm	±2.0
Flatness	μm	±2.5
Rated Payload ¹	kg	5
No-load Moving Mass	kg	1.9
No-load Total Mass	kg	3.5
Max. Allowable Horizontal Mounting Load	kg	12
Max. Allowable Side Mounting Load	kg	10
Max. Allowable Roll Moment Load	Nm	41.4
Max. Allowable Pitch Moment Load	Nm	60.9
Max. Allowable Yaw Moment Load	Nm	73.9

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing

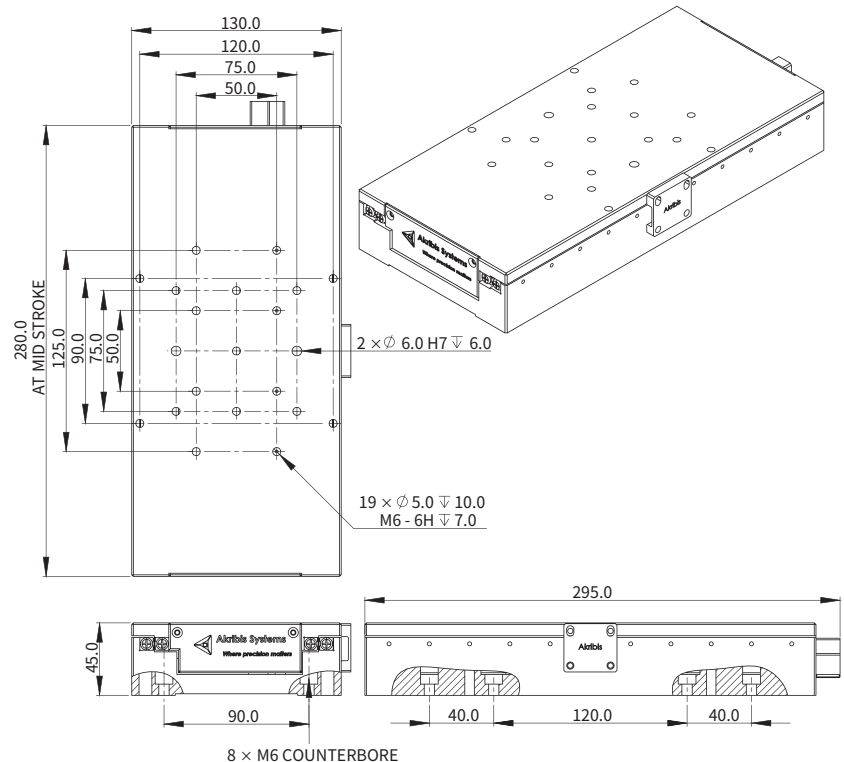


XRL130-160

Specifications	Unit	Value
Effective Stroke	mm	160
Continuous Force	N	26.4
Peak Force	N	132.0
Resolution	μm	QT: 0.1 TN: SINCOS
Bidirectional Repeatability	μm	QT: ±0.3 TONIC: ±0.1 (4096X Interpolation)
Straightness	μm	±2.0
Flatness	μm	±2.5
Rated Payload ¹	kg	5
No-load Moving Mass	kg	2.3
No-load Total Mass	kg	3.9
Max. Allowable Horizontal Mounting Load	kg	12
Max. Allowable Side Mounting Load	kg	10
Max. Allowable Roll Moment Load	Nm	64.2
Max. Allowable Pitch Moment Load	Nm	88.4
Max. Allowable Yaw Moment Load	Nm	107.3

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing

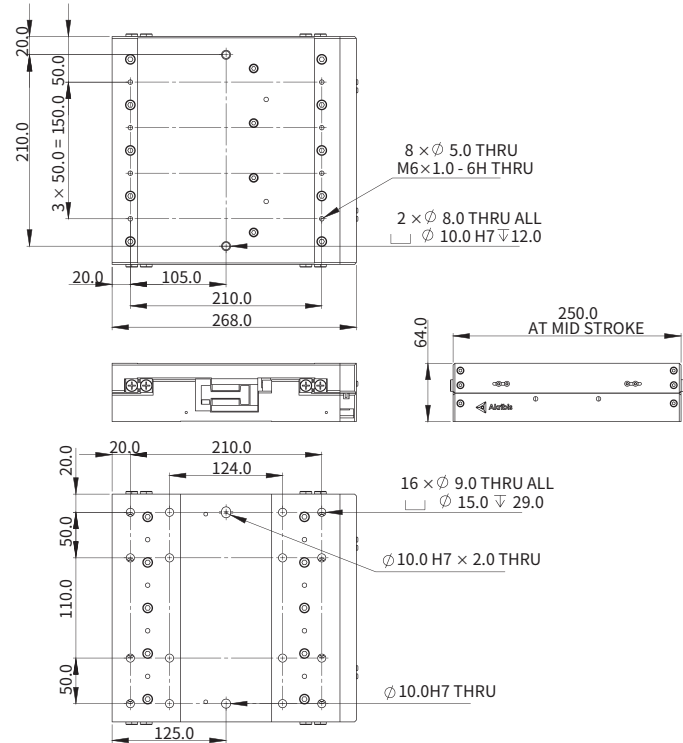


XRL250-100-S2 / XRL250-50-S3

XRL250			
Specifications	Unit	S2	S3
Effective Stroke	mm	100	50
Motor	-	AUM3-S2	AUM3-S3
Continuous Force	N	57.0	85.0
Peak Force	N	289.0	433.0
Resolution	μm	ABI21: 0.5/0.2	
		AT2: 0.2/0.05	
Bidirectional Repeatability	μm	ABI21-0.5: ±2	
		ABI21-0.2: ±1	
		AT2-0.2: ±1	
		AT2-0.05: ±0.5	
Straightness	μm	±3.0	±3.0
Flatness	μm	±3.5	±3.5
Rated Payload ¹	kg	8.0	9.0
No-load Moving Mass	kg	6.0	6.0
No-load Total Mass	kg	12.5	13.0
Max. Allowable Horizontal Mounting Load	kg	30	30
Max. Allowable Side Mounting Load	kg	26	26
Max. Allowable Roll Moment Load	Nm	233.3	233.3
Max. Allowable Pitch Moment Load	Nm	208.8	208.8
Max. Allowable Yaw Moment Load	Nm	253.6	253.6

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing

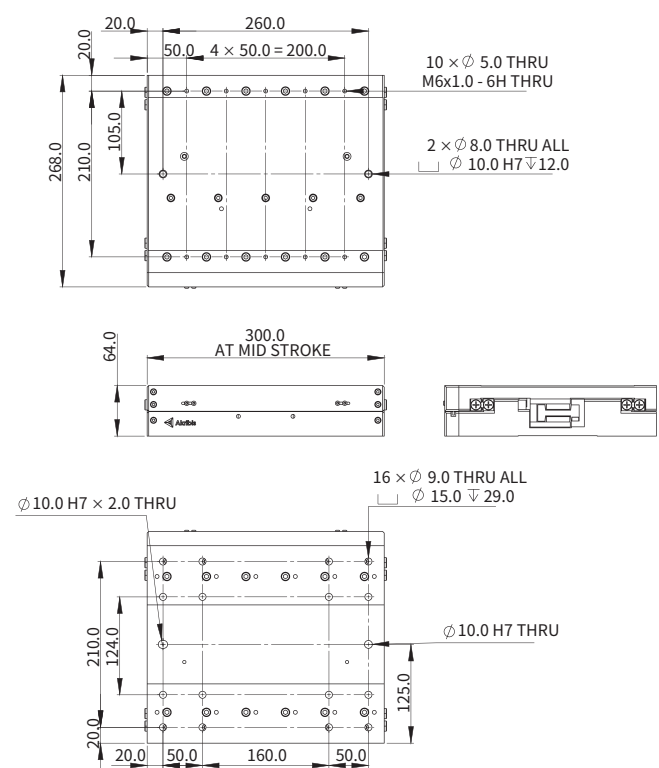


XRL250-150-S2 / XRL250-100-S3

XRL250			
Specifications	Unit	S2	S3
Effective Stroke	mm	150	100
Motor	-	AUM3-S2	AUM3-S3
Continuous Force	N	57.0	85.0
Peak Force	N	289.0	433.0
Resolution	μm	ABI21: 0.5/0.2	
		AT2: 0.2/0.05	
Bidirectional Repeatability	μm	ABI21-0.5: ±2	
		ABI21-0.2: ±1	
		AT2-0.2: ±1	
		AT2-0.05: ±0.5	
Straightness	μm	±3.0	±3.0
Flatness	μm	±3.5	±3.5
Rated Payload ¹	kg	9.0	10.0
No-load Moving Mass	kg	7.20	7.2.0
No-load Total Mass	kg	15.0	15.5
Max. Allowable Horizontal Mounting Load	kg	30	30
Max. Allowable Side Mounting Load	kg	26	26
Max. Allowable Roll Moment Load	Nm	292.1	292.1
Max. Allowable Pitch Moment Load	Nm	321.1	321.1
Max. Allowable Yaw Moment Load	Nm	390.0	390.0

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing

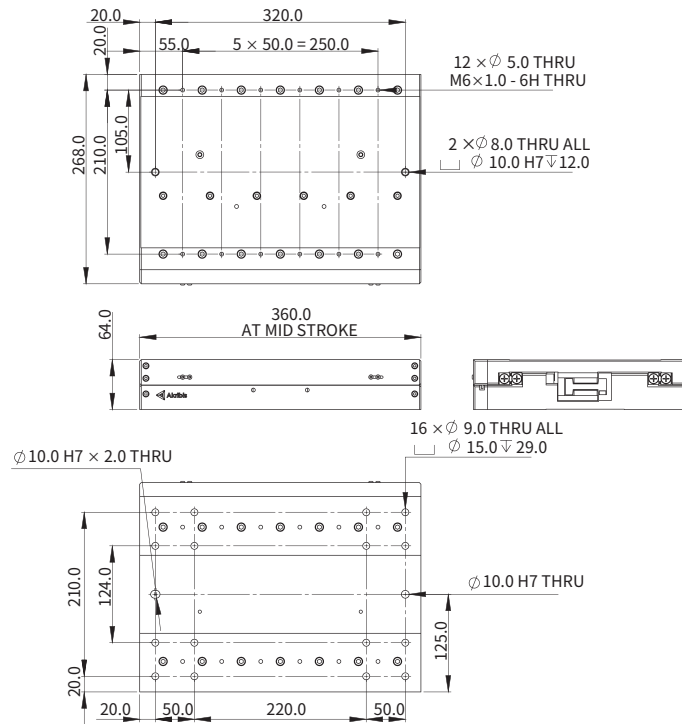


XRL250-200-S2 / XRL250-150-S3

XRL250			
Specifications	Unit	S2	S3
Effective Stroke	mm	200	150
Motor	-	AUM3-S2	AUM3-S3
Continuous Force	N	57.0	85.0
Peak Force	N	289.0	433.0
Resolution	μm	ABI21: 0.5/0.2	
		AT2: 0.2/0.05	
Bidirectional Repeatability	μm	ABI21-0.5: ±2	
		ABI21-0.2: ±1	
		AT2-0.2: ±1	
		AT2-0.05: ±0.5	
Straightness	μm	±3.0	±3.0
Flatness	μm	±3.5	±3.5
Rated Payload ¹	kg	9.0	11.0
No-load Moving Mass	kg	8.7	8.7
No-load Total Mass	kg	17.9	18.4
Max. Allowable Horizontal Mounting Load	kg	30	30
Max. Allowable Side Mounting Load	kg	26	26
Max. Allowable Roll Moment Load	Nm	320.2	320.2
Max. Allowable Pitch Moment Load	Nm	393.9	393.9
Max. Allowable Yaw Moment Load	Nm	478.4	478.4

¹ The rated load is based on the load in which the acceleration of the mass is at least 1G.

Dimension Drawing



Ordering Part Number (OPN)

XL1 T 03 U04 EBH 1 A 1

Model:

XL1: XRL130

Cover Type:

T: Standard (Black Anodized)

Effective Stroke:

03: 35mm
06: 60mm
11: 110mm
16: 160mm

Motor Type:

U04: AUM2-S-S3-K (Peak Force: 132.0N)
U05: AUM2-P-S3-K (Peak Force: 132.0N)

Termination:

1: Flying Leads
2: DSUB
3: M23

Cable Length:

A: 0.5m

Scale Type:

1: Steel tape, 11ppm/K

Encoder Type:

EBH: Quantic (0.1µm)
EEA: Tonic (SINCOS)

XL2 T 05 U17 E0F 1 A 1

Model:

XL2: XRL250

Cover Type:

T: Standard (Black Anodized)

Effective Stroke:

05: 50mm
10: 100mm
15: 150mm
20: 200mm

Motor Type:

U17: AUM3-S-S2-J (Peak Force: 289.0N)
U18: AUM3-S-S2-K (Peak Force: 289.0N)
U19: AUM3-P-S2-J (Peak Force: 289.0N)
U20: AUM3-P-S2-K (Peak Force: 289.0N)
U21: AUM3-S-S3-J (Peak Force: 433.0N)
U22: AUM3-S-S3-K (Peak Force: 433.0N)
U23: AUM3-P-S3-J (Peak Force: 433.0N)
U24: AUM3-P-S3-K (Peak Force: 433.0N)

Termination:

1: Flying Lead
2: DSUB
3: M23

Cable Length:

A: 0.5m
B: 3.0m

Scale Type:

1: Steel tape, 11ppm/K

Encoder Type:

E0F: ABI-21 (0.5µm)
E0G: ABI-21 (0.2µm)
ECG: ATOM2 (0.2µm)
ECJ: ATOM2 (0.05µm)

