

엘파텍은 창립 이래 LED, 휴대폰, 반도체 생산장비 기술개발에 일조하고 있으며,
고객에게 차별화된 기술과 서비스로 신뢰 받는 기업이 되기 위해 노력하고 있습니다.

열정과 끊임없는
가치 창조

고객의
관심과 성원에
신뢰와 감동



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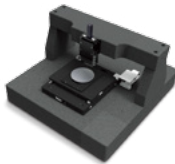




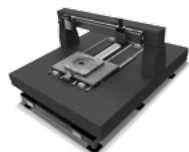
| | | | |
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| <ul style="list-style-type: none"> · ETS Series 75 Desktop Stage | <ul style="list-style-type: none"> · EPCS Series 77 Cross-Roller Guide X-Y Stage | |
| <div style="border: 1px solid black; padding: 5px; width: 150px; margin: 0 auto;"> <p>ETS 75</p>  </div> | <div style="border: 1px solid black; padding: 5px; width: 150px; margin: 0 auto;"> <p>EPCS 77</p>  </div> | |
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| <div style="border: 1px solid black; padding: 5px; width: 150px; margin: 0 auto;"> <p>UVW 87</p>  </div> | <div style="border: 1px solid black; padding: 5px; width: 150px; margin: 0 auto;"> <p>ECS Series 89</p>  </div> | <div style="border: 1px solid black; padding: 5px; width: 150px; margin: 0 auto;"> <p>EHS Series 90</p>  </div> |
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LINEAR MOTOR STAGE

ELS Series 소개



ELS 250 - 2 S 2400 B A - A C1

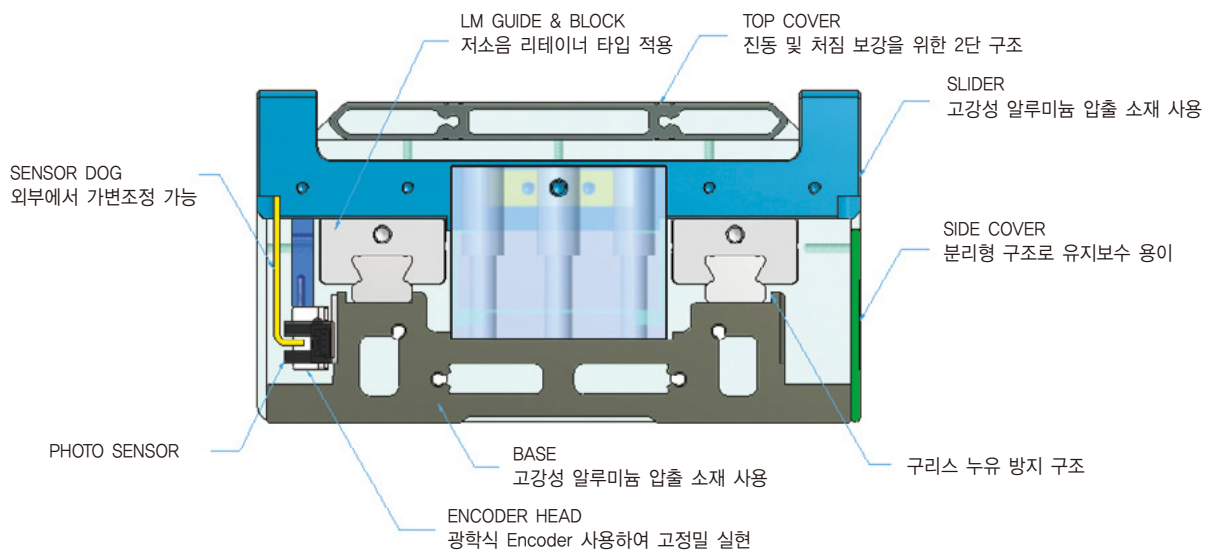
1 2 3 4 5 6 7 8 9

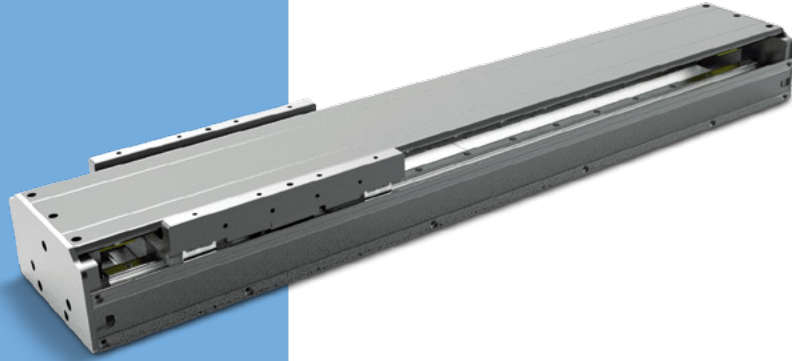
| | | | | | |
|------|----------------------|------------------------------------|-------|------------------------|--|
| 1 | ELPATEC LINEAR STAGE | 6 | 외관 색상 | B : Black W : White | |
| 2 | Base Width (mm) | 168 200 250 300 | 7 | Encoder 사양 | A : Analog B : Resolution 5um C : Resolution 1um D : Resolution 0,5um E : Resolution 0,1um |
| 3 | 이송 Table 수량 (Slider) | 1 2 3 ⋮ | 8 | Motor Maker | |
| 4, 5 | 스트로크 전체길이 | S2400 : 2400 mm L2400 : 2400 mm | 9 | Motor 형번 | |

■ ELS Series



■ 구조와 특징





소형 LINEAR MOTOR STAGE

ELS 168 Series

Performance Specifications

| | |
|---|---|
| Repeatability (μm) | $\pm 1\mu\text{m}$ (Resolution of $1\mu\text{m}$ or Better) |
| Accuracy ($\mu\text{m}/\text{mm}$) (주 1) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Flatness / Straightness ($\mu\text{m}/\text{mm}$) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Moving Stroke | 0 ~ 3000 mm |
| Motor Coil Type | Core Type (협의 후 변경 가능) |
| Base Color | Black or White (협의 후 변경가능) |
| Accessory | Cable, Vayor, Bracket & Driver, etc. |

(주1) Error Mapping 이전 DATA

Linear Motor Specifications

| ELS168-xSxxxxXX-A(spec.) | | | | | | | | |
|---------------------------|--|------------|------------|-------------|-------------|-------------|-------------|-------------|
| Spec. | A1 | A2 | A3 | A4 | B1 | B2 | B3 | B4 |
| Continuous Force | 18,8 N | 38,0 N | 56,8 N | 75,2 N | 42,1 N | 84,5 N | 125,1 N | 166,7 N |
| Peak Force | 56,4 N | 114,0 N | 170,5 N | 225,7 N | 126,3 N | 253,5 N | 375,3 N | 500,1 N |
| Continuous Current | 1,3 Arms | | | | 2,0 Arms | | | |
| Peak Current | 3,9 Arms | | | | 6,0 Arms | | | |
| Condition A | Velocity : 1,5m/s Accelation : 1,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | | | | | |
| (주2) Maximum Payload (kg) | within 0,6 | within 2,5 | within 4,2 | within 5,9 | within 3,2 | within 7,6 | within 11,6 | within 15,8 |
| Condition B | Velocity : 1m/s Accelation : 1G Stroke : 300mm Dwell Time : 1000msec (주1) | | | | | | | |
| (주2) Maximum Payload (kg) | within 1,7 | within 4,7 | within 7,5 | within 10,2 | within 5,6 | within 12,5 | within 18,8 | within 25,4 |
| Condition C | Velocity : 0,5m/s Accelation : 0,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | | | | | |
| (주2) Maximum Payload (kg) | within 4,9 | within 11 | within 17 | within 22,8 | within 12,7 | within 26,7 | within 39,9 | within 53,5 |

※ (주1) 속도 / 가속도 / Stroke 등 기타 조건 변경시 검토 필요

※ (주2) Motor + Slider + LM Block(4 BLK) Weight을 제외한 최대부하 (위 Data는 참고용으로 설계전 Motion에 따른 정확한 사용을 검토 필요)

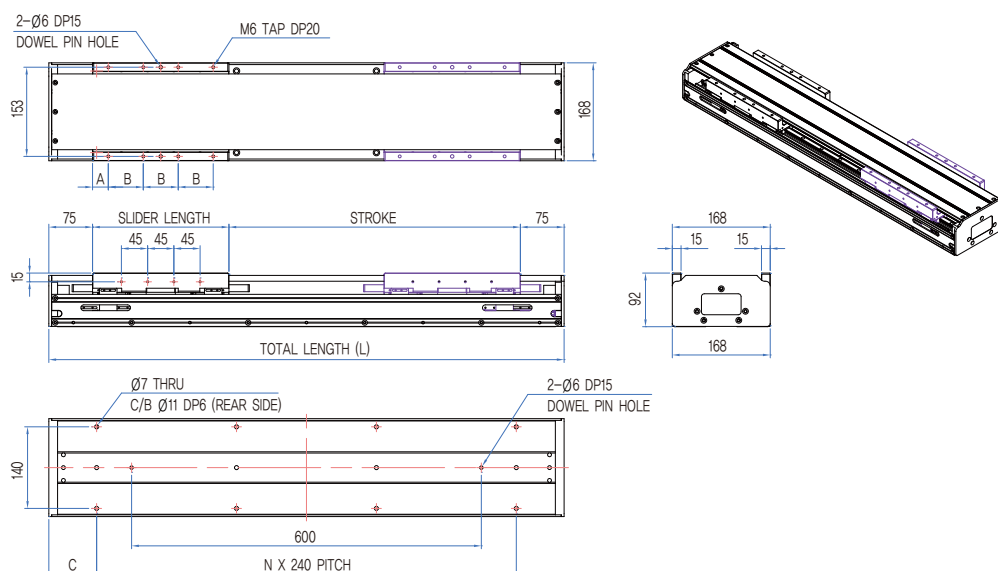
Available in Different Linear Motor [ELS 168 Series]

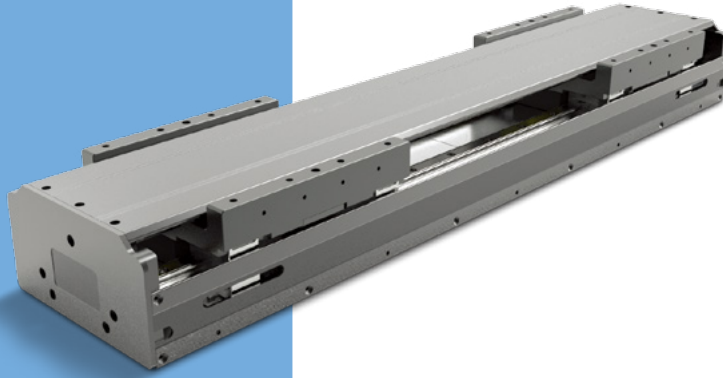
| Maker | Model | Maker | Model |
|------------|------------------------------------|---------|----------------------------------|
| Yaskawa | SGLFW-20A Series, SGLFW-35A Series | Akribis | ACM1-S30, ACM1-L30 |
| Mitsubishi | LM-H2P1A-06M-4SS0 | THK | CDM04-40C, CDM05 Series |
| Tecnotion | TM Series | TPC | NMTL-FMI Series, NMTL-FSM Series |
| Parker | R5 Series | | |

■ Dimensions Table

| Model | Stroke | Total Length | A | B | C | N | Slider Length | Weight (kg) |
|---------------------|--------|--------------|----|----|-----|---|---------------|-------------|
| ELS168-1S0500xx-AA1 | 500 | 740 | 20 | 40 | 10 | 3 | 90 | 12,5 |
| ELS168-1S1000xx-AA1 | 1000 | 1240 | 20 | 40 | 20 | 5 | 90 | 19 |
| ELS168-1S1500xx-AA1 | 1500 | 1740 | 20 | 40 | 30 | 7 | 90 | 25 |
| ELS168-1S2000xx-AA1 | 2000 | 2240 | 20 | 40 | 40 | 9 | 90 | 31,5 |
| ELS168-1S0500xx-AA2 | 500 | 774 | 20 | 40 | 27 | 3 | 124 | 13,3 |
| ELS168-1S1000xx-AA2 | 1000 | 1274 | 20 | 40 | 37 | 5 | 124 | 20 |
| ELS168-1S1500xx-AA2 | 1500 | 1774 | 20 | 40 | 47 | 7 | 124 | 26 |
| ELS168-1S2000xx-AA2 | 2000 | 2274 | 20 | 40 | 57 | 9 | 124 | 32,5 |
| ELS168-1S0500xx-AA3 | 500 | 810 | 18 | 50 | 45 | 3 | 160 | 13,8 |
| ELS168-1S1000xx-AA3 | 1000 | 1310 | 18 | 50 | 55 | 5 | 160 | 20 |
| ELS168-1S1500xx-AA3 | 1500 | 1810 | 18 | 50 | 65 | 7 | 160 | 26,5 |
| ELS168-1S2000xx-AA3 | 2000 | 2310 | 18 | 50 | 75 | 9 | 160 | 33 |
| ELS168-1S0500xx-AA4 | 500 | 846 | 27 | 60 | 63 | 3 | 196 | 15,5 |
| ELS168-1S1000xx-AA4 | 1000 | 1346 | 27 | 60 | 73 | 5 | 196 | 22 |
| ELS168-1S1500xx-AA4 | 1500 | 1846 | 27 | 60 | 83 | 7 | 196 | 28 |
| ELS168-1S2000xx-AA4 | 2000 | 2346 | 27 | 60 | 93 | 9 | 196 | 34,5 |
| ELS168-1S0500xx-AB1 | 500 | 740 | 20 | 40 | 10 | 3 | 90 | 14,5 |
| ELS168-1S1000xx-AB1 | 1000 | 1240 | 20 | 40 | 20 | 5 | 90 | 22 |
| ELS168-1S1500xx-AB1 | 1500 | 1740 | 20 | 40 | 30 | 7 | 90 | 30 |
| ELS168-1S2000xx-AB1 | 2000 | 2240 | 20 | 40 | 40 | 9 | 90 | 37 |
| ELS168-1S0500xx-AB2 | 500 | 788 | 20 | 40 | 34 | 3 | 138 | 15 |
| ELS168-1S1000xx-AB2 | 1000 | 1288 | 20 | 40 | 44 | 5 | 138 | 23,5 |
| ELS168-1S1500xx-AB2 | 1500 | 1788 | 20 | 40 | 54 | 7 | 138 | 31 |
| ELS168-1S2000xx-AB2 | 2000 | 2288 | 20 | 40 | 64 | 9 | 138 | 38,5 |
| ELS168-1S0500xx-AB3 | 500 | 836 | 18 | 50 | 58 | 3 | 186 | 15,5 |
| ELS168-1S1000xx-AB3 | 1000 | 1336 | 18 | 50 | 68 | 5 | 186 | 24,5 |
| ELS168-1S1500xx-AB3 | 1500 | 1836 | 18 | 50 | 78 | 7 | 186 | 32 |
| ELS168-1S2000xx-AB3 | 2000 | 2336 | 18 | 50 | 88 | 9 | 186 | 39,5 |
| ELS168-1S0500xx-AB4 | 500 | 884 | 27 | 60 | 82 | 3 | 234 | 18 |
| ELS168-1S1000xx-AB4 | 1000 | 1384 | 27 | 60 | 92 | 5 | 234 | 25,5 |
| ELS168-1S1500xx-AB4 | 1500 | 1884 | 27 | 60 | 102 | 7 | 234 | 33,5 |
| ELS168-1S2000xx-AB4 | 2000 | 2384 | 27 | 60 | 112 | 9 | 234 | 41 |

■ External Dimension





중형 LINEAR MOTOR STAGE

ELS 200 Series

■ Performance Specifications

| | |
|---|---|
| Repeatability (μm) | $\pm 1\mu\text{m}$ (Resolution of $1\mu\text{m}$ or Better) |
| Accuracy ($\mu\text{m}/\text{mm}$) (주 1) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Flatness / Straightness ($\mu\text{m}/\text{mm}$) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Moving Stroke | 0 ~ 3000 mm |
| Motor Coil Type | Core Type (협의 후 변경 가능) |
| Base Color | Black or White (협의 후 변경가능) |
| Accessory | Cable, Vayor, Bracket & Driver, etc. |

(주1) Error Mapping 이전 DATA

■ Linear Motor Specifications

| ELS200-xSxxxxXX-A(spec.) | | | | |
|---------------------------|--|-----------|-----------|------------|
| Spec. | C1 | C2 | C3 | C4 |
| Continuous Force | 78,3 N | 157,4 N | 236,2 N | 315,3 N |
| Peak Force | 234,9 N | 472,2 N | 708,6 N | 945,9 N |
| Continuous Current | 3,8 Arms | | | |
| Peak Current | 11,4 Arms | | | |
| Condition A | Velocity : 1,5m/s Accelation : 1,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 6 | within 14 | within 22 | within 30 |
| Condition B | Velocity : 1m/s Accelation : 1G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 10 | within 23 | within 36 | within 48 |
| Condition C | Velocity : 0,5m/s Accelation : 0,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 24 | within 50 | within 75 | within 101 |

※ (주1) 속도 / 가속도 / Stroke 등 기타 조건 변경시 검토 필요

※ (주2) Motor + Slider + LM Block(4 BLK) Weight을 제외한 최대부하 (위 Data는 참고용으로 설계전 Motion에 따른 정확한 사용을 검토 필요)

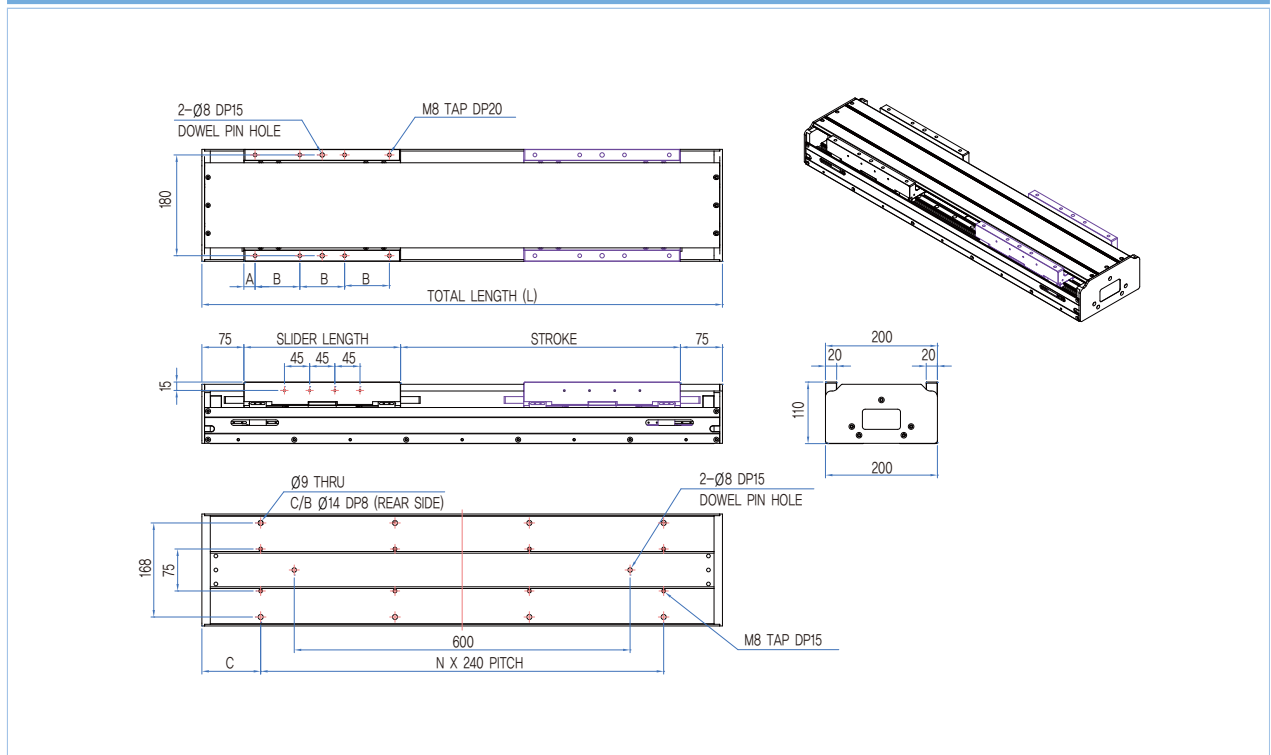
■ Available in Different Linear Motor [ELS 200 Series]

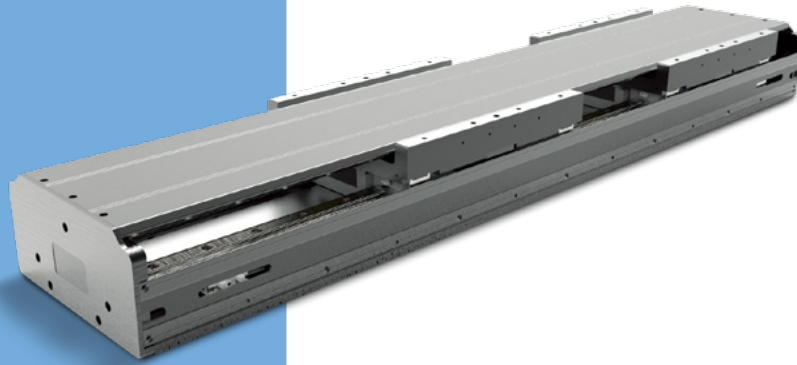
| Maker | Model | Maker | Model |
|------------|----------------|-------|----------------------------|
| Mitsubishi | LM-H2P2 Series | THK | CDM10 Series, CDM15 Series |
| Parker | R7 Series | TPC | NMTL-FMD Series |

Dimensions Table

| Model | Stroke | Total Length | A | B | C | N | Slider Length | Weight (kg) |
|---------------------|--------|--------------|----|----|-----|---|---------------|-------------|
| ELS200-1S0500xx-AC1 | 500 | 770 | 20 | 40 | 25 | 3 | 120 | 22 |
| ELS200-1S1000xx-AC1 | 1000 | 1270 | 20 | 40 | 35 | 5 | 120 | 33 |
| ELS200-1S1500xx-AC1 | 1500 | 1770 | 20 | 40 | 45 | 7 | 120 | 45 |
| ELS200-1S2000xx-AC1 | 2000 | 2270 | 20 | 40 | 55 | 9 | 120 | 56 |
| ELS200-1S0500xx-AC2 | 500 | 810 | 20 | 40 | 45 | 3 | 160 | 24 |
| ELS200-1S1000xx-AC2 | 1000 | 1310 | 20 | 40 | 55 | 5 | 160 | 35 |
| ELS200-1S1500xx-AC2 | 1500 | 1810 | 20 | 40 | 65 | 7 | 160 | 46 |
| ELS200-1S2000xx-AC2 | 2000 | 2310 | 20 | 40 | 75 | 9 | 160 | 57 |
| ELS200-1S0500xx-AC3 | 500 | 870 | 20 | 60 | 75 | 3 | 220 | 27 |
| ELS200-1S1000xx-AC3 | 1000 | 1370 | 20 | 60 | 85 | 5 | 220 | 38 |
| ELS200-1S1500xx-AC3 | 1500 | 1870 | 20 | 60 | 95 | 7 | 220 | 48 |
| ELS200-1S2000xx-AC3 | 2000 | 2370 | 20 | 60 | 105 | 9 | 220 | 60 |
| ELS200-1S0500xx-AC4 | 500 | 930 | 20 | 80 | 105 | 3 | 280 | 29 |
| ELS200-1S1000xx-AC4 | 1000 | 1430 | 20 | 80 | 115 | 5 | 280 | 40 |
| ELS200-1S1500xx-AC4 | 1500 | 1930 | 20 | 80 | 125 | 7 | 280 | 52 |
| ELS200-1S2000xx-AC4 | 2000 | 2430 | 20 | 80 | 135 | 9 | 280 | 62 |

External Dimension





중대형 LINEAR MOTOR STAGE

ELS 250 Series

■ Performance Specifications

| | |
|---|---|
| Repeatability (μm) | $\pm 1\mu\text{m}$ (Resolution of $1\mu\text{m}$ or Better) |
| Accuracy ($\mu\text{m}/\text{mm}$) (주 1) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Flatness / Straightness ($\mu\text{m}/\text{mm}$) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Moving Stroke | 0 ~ 3000 mm |
| Motor Coil Type | Core Type (협의 후 변경 가능) |
| Base Color | Black or White (협의 후 변경가능) |
| Accessory | Cable, Vayor, Bracket & Driver, etc. |

(주1) Error Mapping 이전 DATA

■ Linear Motor Specifications

| ELS250-xSxxxxXX-A(spec.) | | | | |
|---------------------------|---|------------|------------|------------|
| Spec. | D1 | D2 | D3 | D4 |
| Continuous Force | 162,6 N | 319,3 N | 480,5 N | 639,3 N |
| Peak Force | 487,8 N | 957,9 N | 1,441,5 N | 1,917,9 N |
| Continuous Current | 6,4 Arms | | | |
| Peak Current | 19,2 Arms | | | |
| Condition A | Velocity : 1,5m/s Accelation : 1,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 13 | within 28 | within 44 | within 60 |
| Condition B | Velocity : 1m/s Accelation : 1G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 22 | within 47 | within 72 | within 97 |
| Condition C | Velocity : 0,5m/s Accelation : 0,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 50 | within 101 | within 154 | within 205 |

※ (주1) 속도 / 가속도 / Stroke 등 기타 조건 변경시 검토 필요

※ (주2) Motor + Slider + LM Block(4 BLK) Weight을 제외한 최대부하 (위 Data는 참고용으로 설계전 Motion에 따른 정확한 사용을 검토 필요)

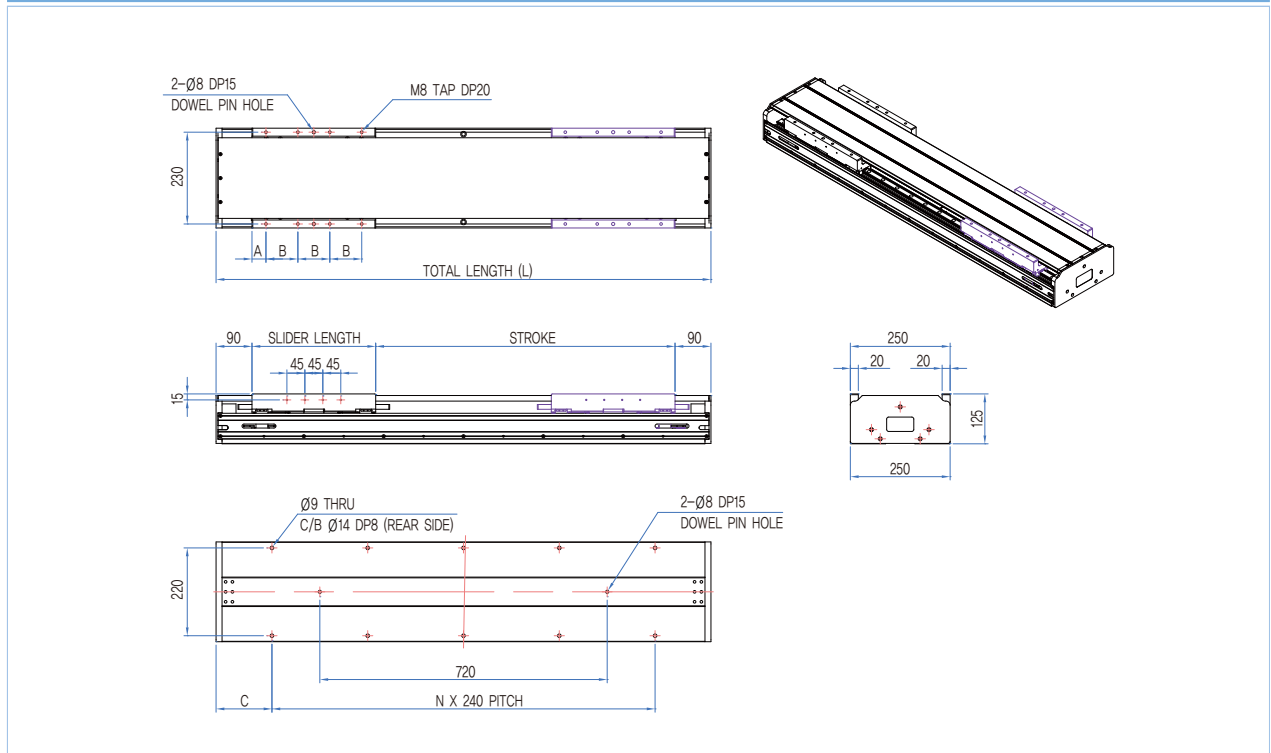
■ Available in Different Linear Motor [ELS 250 Series]

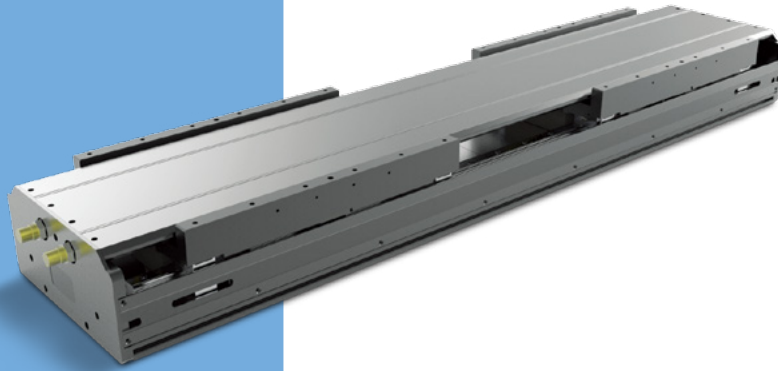
| Maker | Model | Maker | Model |
|-----------|--|--------|--------------|
| Yaskawa | SGLFW-50A Series | Parker | R10 Series |
| Tecnotion | TL Series | THK | CDM20 Series |
| Akribis | ACM1-S50, ACM1-L50, ACM2 Series, ACM3 Series | | |

■ Dimensions Table

| Model | Stroke | Total Length | A | B | C | N | Slider Length | Weight (kg) |
|---------------------|--------|--------------|----|-----|-----|----|---------------|-------------|
| ELS250-1S0500xx-AD1 | 500 | 840 | 23 | 60 | 60 | 3 | 160 | 37 |
| ELS250-1S1000xx-AD1 | 1000 | 1340 | 23 | 60 | 70 | 5 | 160 | 53 |
| ELS250-1S1500xx-AD1 | 1500 | 1840 | 23 | 60 | 80 | 7 | 160 | 69 |
| ELS250-1S2000xx-AD1 | 2000 | 2340 | 23 | 60 | 90 | 9 | 160 | 85 |
| ELS250-1S0500xx-AD2 | 500 | 906 | 23 | 60 | 93 | 3 | 226 | 40 |
| ELS250-1S1000xx-AD2 | 1000 | 1406 | 23 | 60 | 103 | 5 | 226 | 56 |
| ELS250-1S1500xx-AD2 | 1500 | 1906 | 23 | 60 | 113 | 7 | 226 | 72 |
| ELS250-1S2000xx-AD2 | 2000 | 2406 | 23 | 60 | 123 | 9 | 226 | 88 |
| ELS250-1S0500xx-AD3 | 500 | 990 | 35 | 80 | 135 | 3 | 310 | 46 |
| ELS250-1S1000xx-AD3 | 1000 | 1490 | 35 | 80 | 145 | 5 | 310 | 62 |
| ELS250-1S1500xx-AD3 | 1500 | 1990 | 35 | 80 | 155 | 7 | 310 | 78 |
| ELS250-1S2000xx-AD3 | 2000 | 2490 | 35 | 80 | 165 | 9 | 310 | 95 |
| ELS250-1S0500xx-AD4 | 500 | 1074 | 47 | 100 | 57 | 4 | 394 | 52 |
| ELS250-1S1000xx-AD4 | 1000 | 1574 | 47 | 100 | 67 | 6 | 394 | 68 |
| ELS250-1S1500xx-AD4 | 1500 | 2074 | 47 | 100 | 77 | 8 | 394 | 84 |
| ELS250-1S2000xx-AD4 | 2000 | 2574 | 47 | 100 | 87 | 10 | 394 | 100 |

■ External Dimension





대형 LINEAR MOTOR STAGE

ELS 300 Series

■ Performance Specifications

| | |
|---|---|
| Repeatability (μm) | $\pm 1\mu\text{m}$ (Resolution of $1\mu\text{m}$ or Better) |
| Accuracy ($\mu\text{m}/\text{mm}$) (주 1) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Flatness / Straightness ($\mu\text{m}/\text{mm}$) | $\pm 10\mu\text{m} / 300\text{mm}$ |
| Moving Stroke | 0 ~ 3000 mm |
| Motor Coil Type | Core Type (협의 후 변경 가능) |
| Base Color | Black or White (협의 후 변경가능) |
| Accessory | Cable, Vayor, Bracket & Driver, etc. |

(주1) Error Mapping 이전 DATA

■ Linear Motor Specifications

| ELS300-xSxxxxXX-A(spec.) | | | | |
|---------------------------|---|------------|------------|------------|
| Spec. | E1 | E2 | E3 | E4 |
| Continuous Force | 401,8 N | 822,6 N | 1,231,6 N | 1,638,0 N |
| Peak Force | 1,205,4 N | 2,467,7 N | 3,694,7 N | 4,915,0 N |
| Continuous Current | 11,3 Arms | | | |
| Peak Current | 33,9 Arms | | | |
| Condition A | Velocity : 1,5m/s Accelation : 1,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 38 | within 82 | within 124 | within 130 |
| Condition B | Velocity : 1m/s Accelation : 1G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 61 | within 130 | within 196 | within 262 |
| Condition C | Velocity : 0,5m/s Accelation : 0,5G Stroke : 300mm Dwell Time : 1000msec (주1) | | | |
| (주2) Maximum Payload (kg) | within 129 | within 269 | within 404 | within 539 |

※ (주1) 속도 / 가속도 / Stroke 등 기타 조건 변경시 검토 필요

※ (주2) Motor + Slider + LM Block(4 BLK) Weight을 제외한 최대부하 (위 Data는 참고용으로 설계전 Motion에 따른 정확한 사용을 검토 필요)

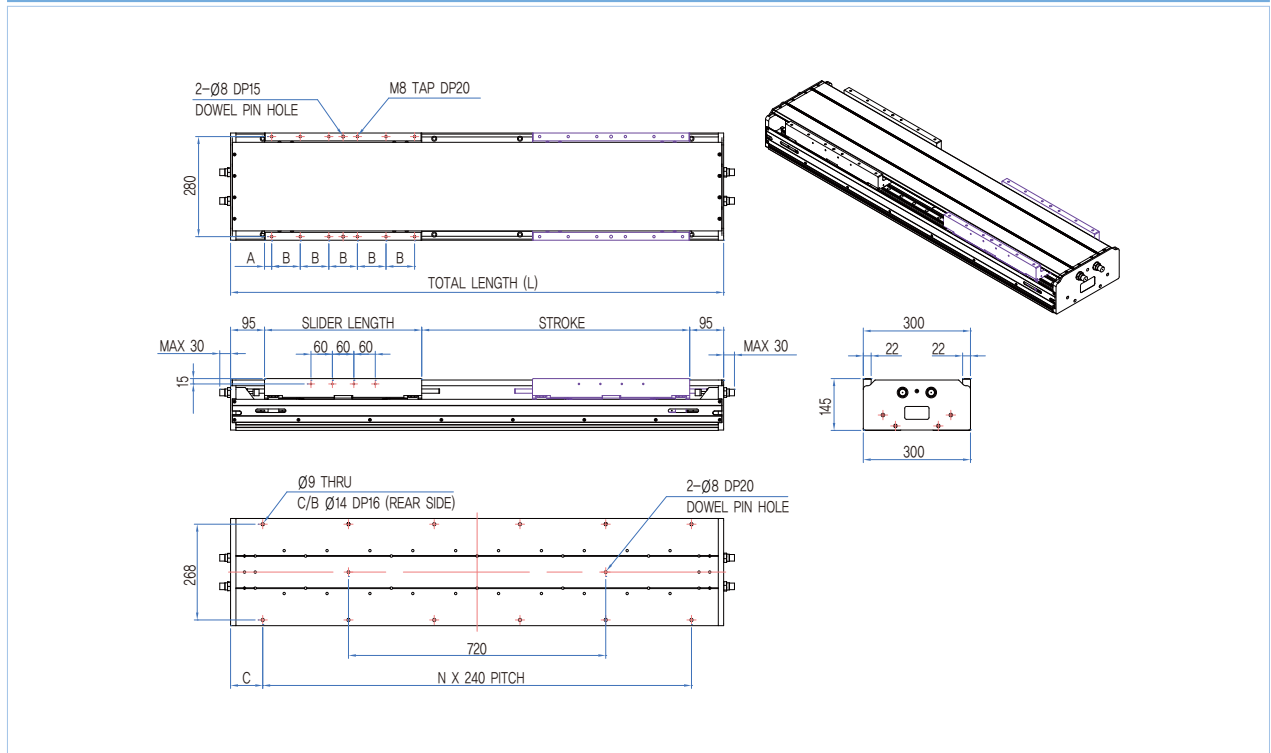
■ Available in Different Linear Motor [ELS 300 Series]

| Maker | Model | Maker | Model |
|------------|-------------------------------|---------|-----------------------------------|
| Yaskawa | SGLFW-1ZA Series | Akribis | ACM1-S100, ACM1-L100, ACM4 Series |
| Mitsubishi | LM-H2P3 Series, LM-FP2 Series | THK | CDM30 Series |
| Tecnotion | TB Series, TBW Series | TPC | NMTL-FLA Series, NMTL-FEX Series |

■ Dimensions Table

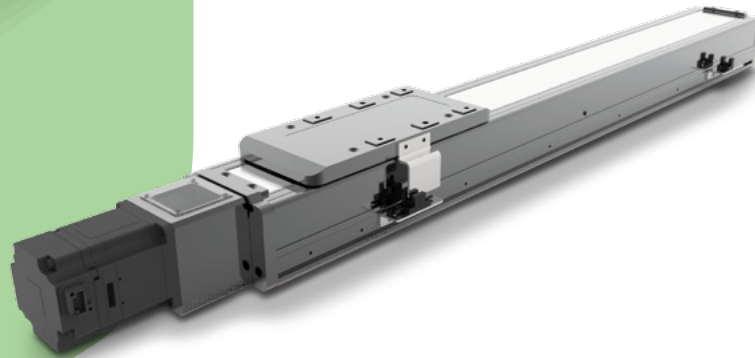
| Model | Stroke | Total Length | A | B | C | N | Slider Length | Weight (kg) |
|---------------------|--------|--------------|----|-----|-----|----|---------------|-------------|
| ELS300-1S0500xx-AE1 | 500 | 890 | 40 | 80 | 85 | 3 | 200 | 62 |
| ELS300-1S0980xx-AE1 | 980 | 1370 | 40 | 80 | 85 | 5 | 200 | 85 |
| ELS300-1S1460xx-AE1 | 1460 | 1850 | 40 | 80 | 85 | 7 | 200 | 105 |
| ELS300-1S1940xx-AE1 | 1940 | 2330 | 40 | 80 | 85 | 9 | 200 | 125 |
| ELS300-1S0500xx-AE2 | 500 | 1010 | 40 | 80 | 145 | 3 | 320 | 65 |
| ELS300-1S0980xx-AE2 | 980 | 1490 | 40 | 80 | 145 | 5 | 320 | 90 |
| ELS300-1S1460xx-AE2 | 1460 | 1970 | 40 | 80 | 145 | 7 | 320 | 110 |
| ELS300-1S1940xx-AE2 | 1940 | 2450 | 40 | 80 | 145 | 9 | 320 | 130 |
| ELS300-1S0500xx-AE3 | 500 | 1130 | 20 | 80 | 85 | 4 | 440 | 77 |
| ELS300-1S0980xx-AE3 | 980 | 1610 | 20 | 80 | 85 | 6 | 440 | 100 |
| ELS300-1S1460xx-AE3 | 1460 | 2090 | 20 | 80 | 85 | 8 | 440 | 120 |
| ELS300-1S1940xx-AE3 | 1940 | 2570 | 20 | 80 | 85 | 10 | 440 | 140 |
| ELS300-1S0500xx-AE4 | 500 | 1250 | 30 | 100 | 145 | 4 | 560 | 90 |
| ELS300-1S0980xx-AE4 | 980 | 1730 | 30 | 100 | 145 | 6 | 560 | 110 |
| ELS300-1S1460xx-AE4 | 1460 | 2210 | 30 | 100 | 145 | 8 | 560 | 130 |
| ELS300-1S1940xx-AE4 | 1940 | 2690 | 30 | 100 | 145 | 10 | 560 | 155 |

■ External Dimension



BALL SCREW TYPE CLEAN ROBOT

ECR Series 소개



ECR 065 - S - 0050 - 20 - 050 A - A - W

1

2

3

4

5

6

7

8

| | | |
|---|-----------------|-----|
| 1 | Base Width (mm) | 065 |
| | | 090 |
| | | 120 |
| | | 160 |

| | | |
|---|-------------|---------------------|
| 2 | Motor Shape | Direct Coupled : S |
| | | Parallel Bottom : B |
| | | Parallel Left : L |
| | | Parallel Right : R |

| | | |
|---|-------------|------------|
| 3 | Stroke (mm) | 50 : 0050 |
| | | 100 : 0100 |
| | | 150 : 0150 |
| | | ⋮ |
| | | 500 : 0500 |

| | | |
|---|-----------------|---------|
| 4 | Ball Screw Lead | 5 : 05 |
| | | 10 : 10 |
| | | 15 : 15 |
| | | 20 : 20 |

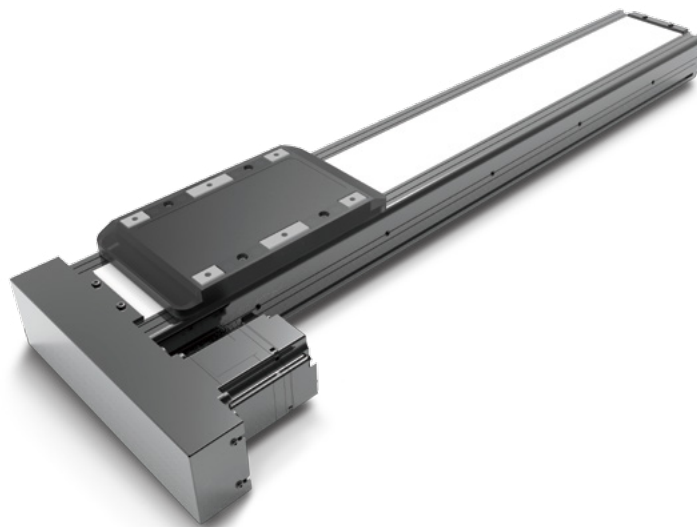
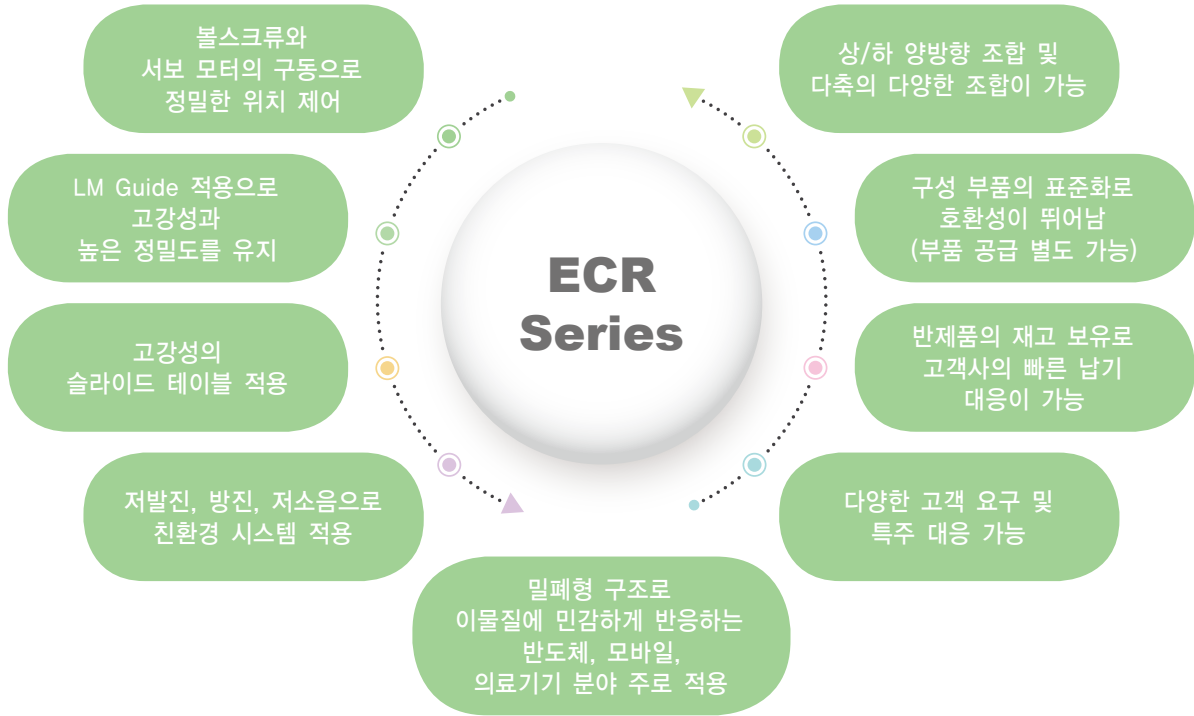
| | | |
|------------------|----------------|-----------------|
| 5 | Motor Capacity | 무설치 : Blank |
| | | 50W : 050 |
| | | 100W : 100 |
| | | 200W : 200 |
| | | 400W : 400 |
| | | 750W : 750 |
| | | 50W Brake : 05B |
| 100W Brake : 10B | | |
| 200W Brake : 20B | | |
| 400W Brake : 40B | | |
| 750W Brake : 75B | | |

| | | |
|---|-------------|-------------------|
| 6 | Motor Maker | Panasonic : A |
| | | Yaskawa : B |
| | | Mitsubishi : C |
| | | Bosch Rexroth : D |

| | | |
|--------------|---------------|--------------|
| 7 | Sensor Option | 무설치 : Blank |
| | | PM-Y65 : A |
| | | PM-L25 : B |
| | | EE-XX672 : C |
| | | EE-XX674 : D |
| EE-XX677 : E | | |

| | | |
|---|-------------|-----------|
| 8 | Robot Color | White : W |
| | | Black : B |

■ ECR Series

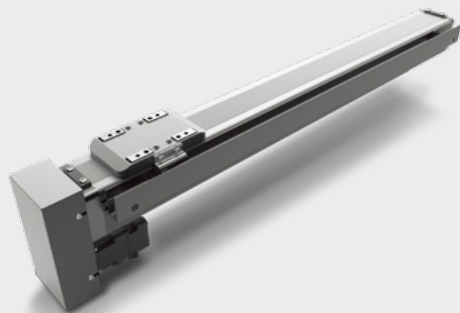


ECR 065 Series

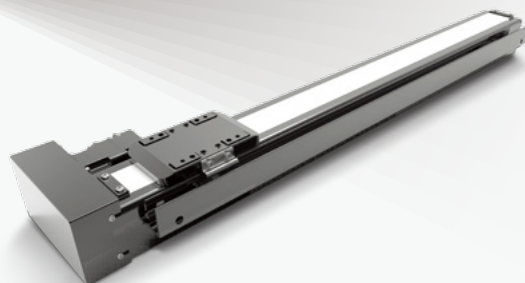
ECR 065-S
Direct Coupled



ECR 065-B
Parallel Bottom



ECR 065-L
Parallel Left



ECR 065-R
Parallel Right



Performance Specifications

| Model | ECR 065 | | | | | |
|--------------------|--------------------------------------|----|--------|----------|----|--------|
| Motor (W) | 50 W ~ 100 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 500 | | | 50 ~ 500 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 1 Way 24 – 1 Block | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| ECR 065 | Ø12 | 5 | 250 mm/sec | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | |

* (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|-------|
| | | | | 50W | 100W |
| ECR 065 | Ø12 | 5 | Horizontal | 8 kg | 12 kg |
| | | | Vertica | 6 kg | 9 kg |
| | | 10 | Horizontal | 5 kg | 10 kg |
| | | | Vertica | 3 kg | 7 kg |
| | | 20 | Horizontal | 3 kg | 6 kg |
| | | | Vertica | 2 kg | 4 kg |

ECR 065-S

Direct Coupled

■ Dimensions Table

(mm)

| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 273 | 323 | 373 | 423 | 473 | 523 | 573 | 623 | 673 | 723 |
| A | 30,5 | 35,5 | 35,5 | 25,5 | 30,5 | 35,5 | 45,5 | 25,5 | 30,5 | 35,5 |
| B | 160 | 200 | 240 | 320 | 360 | 400 | 440 | 520 | 560 | 600 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 13 | 14 | 15 |
| Weight (kg) | 2,7 | 3,2 | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 |

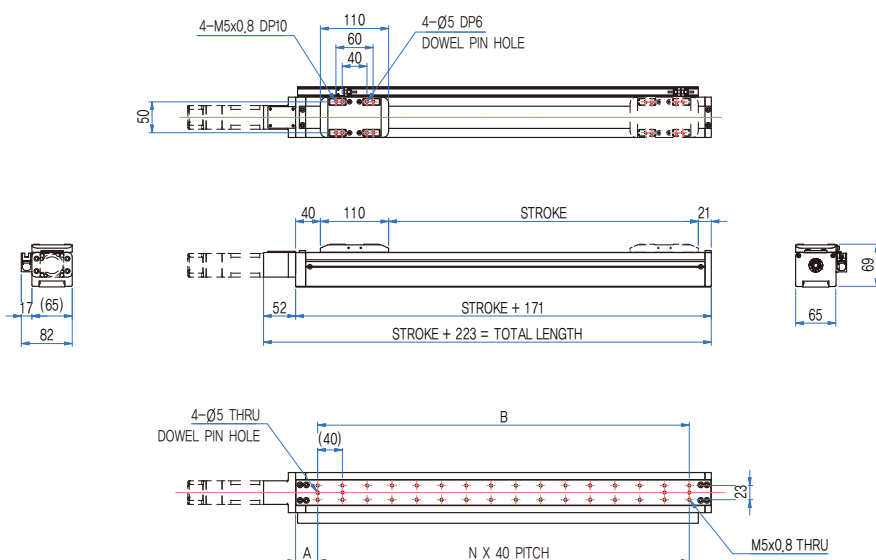
※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model |
|-----|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A |
| | Mitsubishi | HG-KR053 |
| | Yaskawa | SGM7J-A5 |
| | LS Mecapion | FALR5A |

| W | Maker | Model |
|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-01 |
| | LS Mecapion | FAL01A |

■ External Dimension



ECR 065-B

Parallel Bottom

Dimensions Table

(mm)

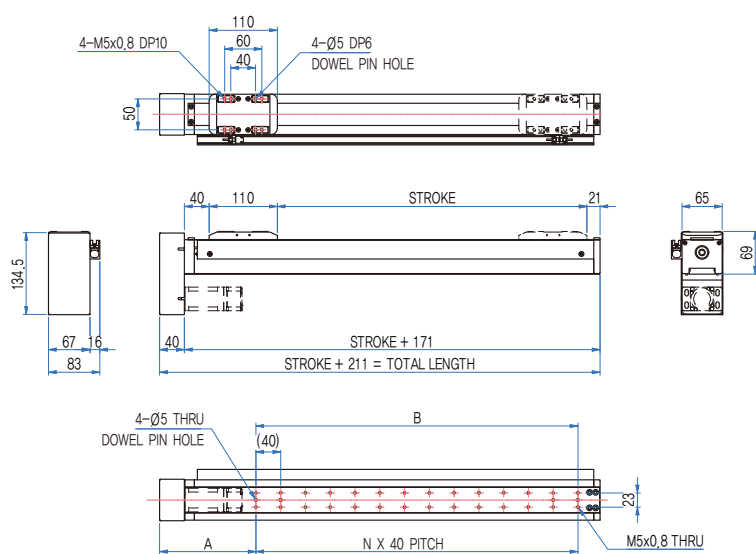
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Total Length | 261 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 |
| A | 185 | 185 | 200 | 185 | 185 | 200 | 200 | 185 | 190 | 190 |
| B | 40 | 80 | 120 | 200 | 240 | 280 | 320 | 400 | 440 | 480 |
| N (EA) | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 10 | 11 | 12 |
| Weight (kg) | 3.7 | 4.2 | 4.7 | 5.2 | 5.7 | 6.2 | 6.7 | 7.2 | 7.7 | 8.2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

External Dimension



ECR 065-L

Parallel Left

■ Dimensions Table

(mm)

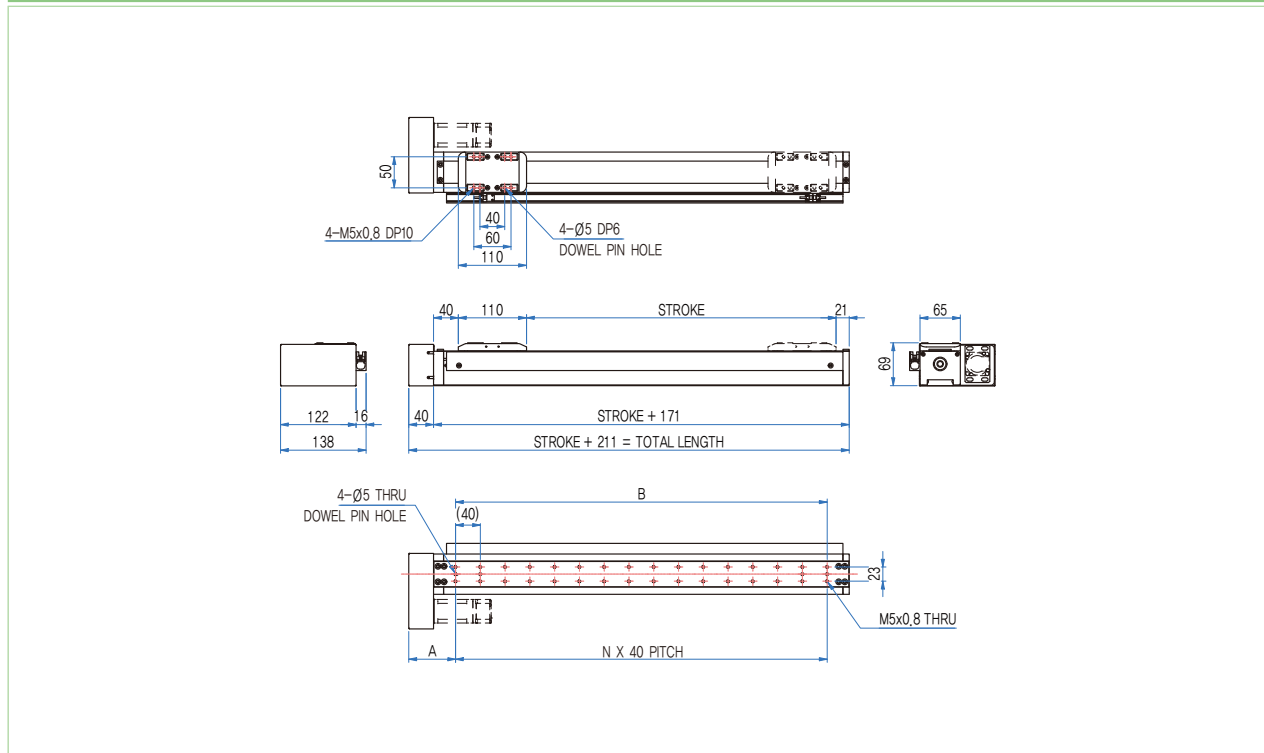
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Total Length | 261 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 |
| A | 70,5 | 75,5 | 80,5 | 85,5 | 90,5 | 95,5 | 100,5 | 105,5 | 110,5 | 115,5 |
| B | 160 | 200 | 240 | 320 | 360 | 400 | 440 | 480 | 560 | 600 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 14 | 15 |
| Weight (kg) | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 | 7,7 | 8,2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

■ External Dimension



ECR 065-R

Parallel Right

Dimensions Table

(mm)

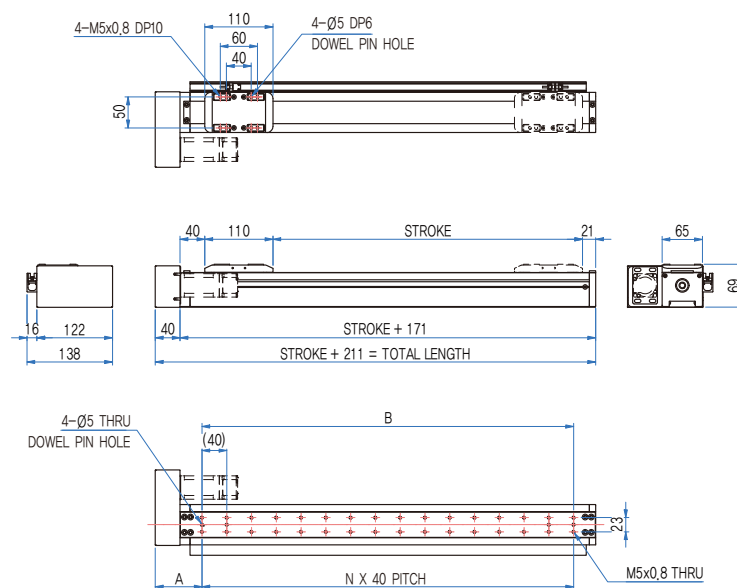
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Total Length | 261 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 |
| A | 70,5 | 75,5 | 80,5 | 85,5 | 90,5 | 95,5 | 100,5 | 105,5 | 110,5 | 115,5 |
| B | 160 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 520 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 14 | 15 |
| Weight (kg) | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 | 7,7 | 8,2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

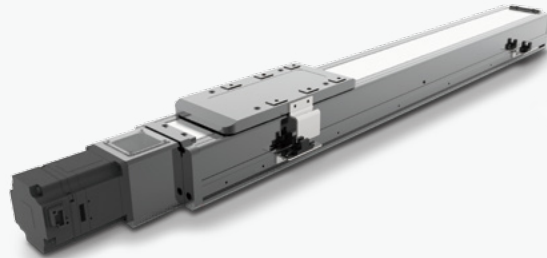
| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

External Dimension

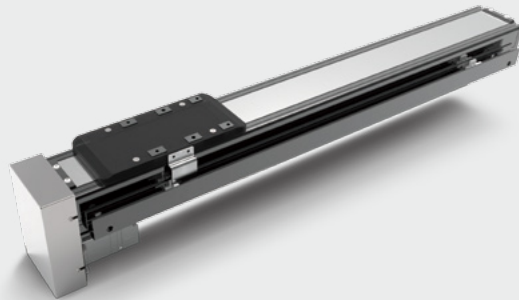


ECR 090 Series

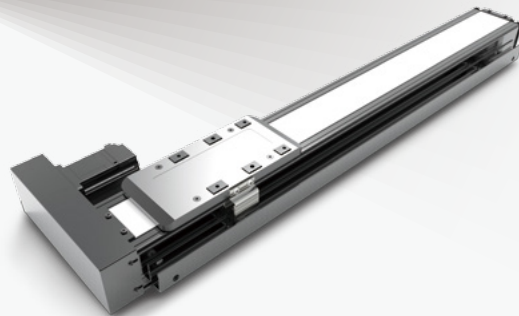
ECR 090-S
Direct Coupled



ECR 090-B
Parallel Bottom



ECR 090-L
Parallel Left



ECR 090-R
Parallel Right



Performance Specifications

| Model | ECR 090 | | | | | |
|--------------------|--------------------------------------|----|--------|-----------|----|--------|
| Motor (W) | 100 W ~ 400 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 1100 | | | 50 ~ 1100 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 2 Way 12WN - 2 BLOCK | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| | | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| ECR 090 | Ø15 | 5 | 250 mm/sec | | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | | |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|-------|
| | | | | 100W | 200W |
| ECR 090 | Ø15 | 5 | Horizontal | 30 kg | 30 kg |
| | | | Vertica | 22 kg | 26 kg |
| | | 10 | Horizontal | 12 kg | 30 kg |
| | | | Vertica | 8 kg | 16 kg |
| | | 20 | Horizontal | 4 kg | 28 kg |
| | | | Vertica | 2 kg | 8 kg |

ECR 090-S

Direct Coupled

■ Dimensions Table

(mm)

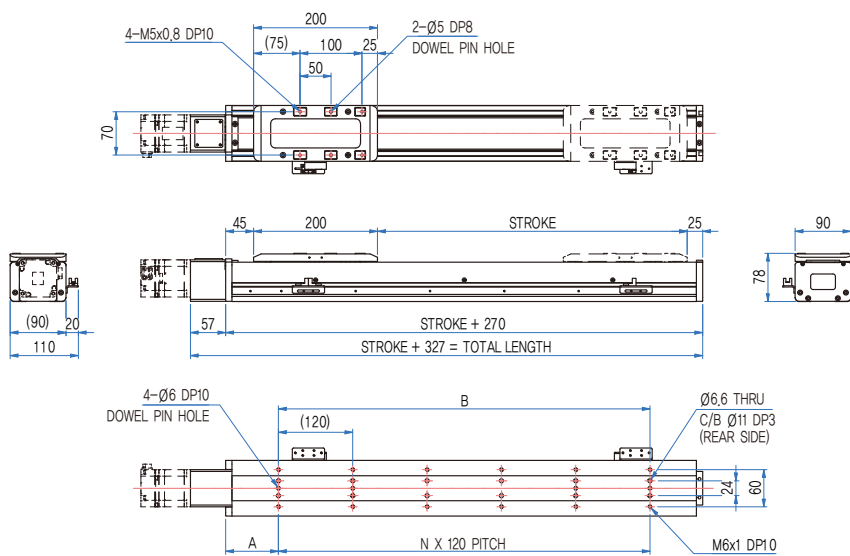
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Total Length | 427 | 527 | 627 | 727 | 827 | 927 | 1027 | 1127 | 1227 | 1327 | 1427 |
| A | 65 | 115 | 105 | 95 | 85 | 135 | 65 | 115 | 105 | 95 | 85 |
| B | 240 | 240 | 360 | 480 | 600 | 720 | 840 | 840 | 960 | 1080 | 1200 |
| N (EA) | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 |
| Weight (kg) | 2.8 | 4.1 | 5.4 | 6.7 | 7.8 | 8.9 | 10.2 | 11.5 | 12.8 | 14.1 | 15.4 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

■ External Dimension



ECR 090-B

Parallel Bottom

■ Dimensions Table

(mm)

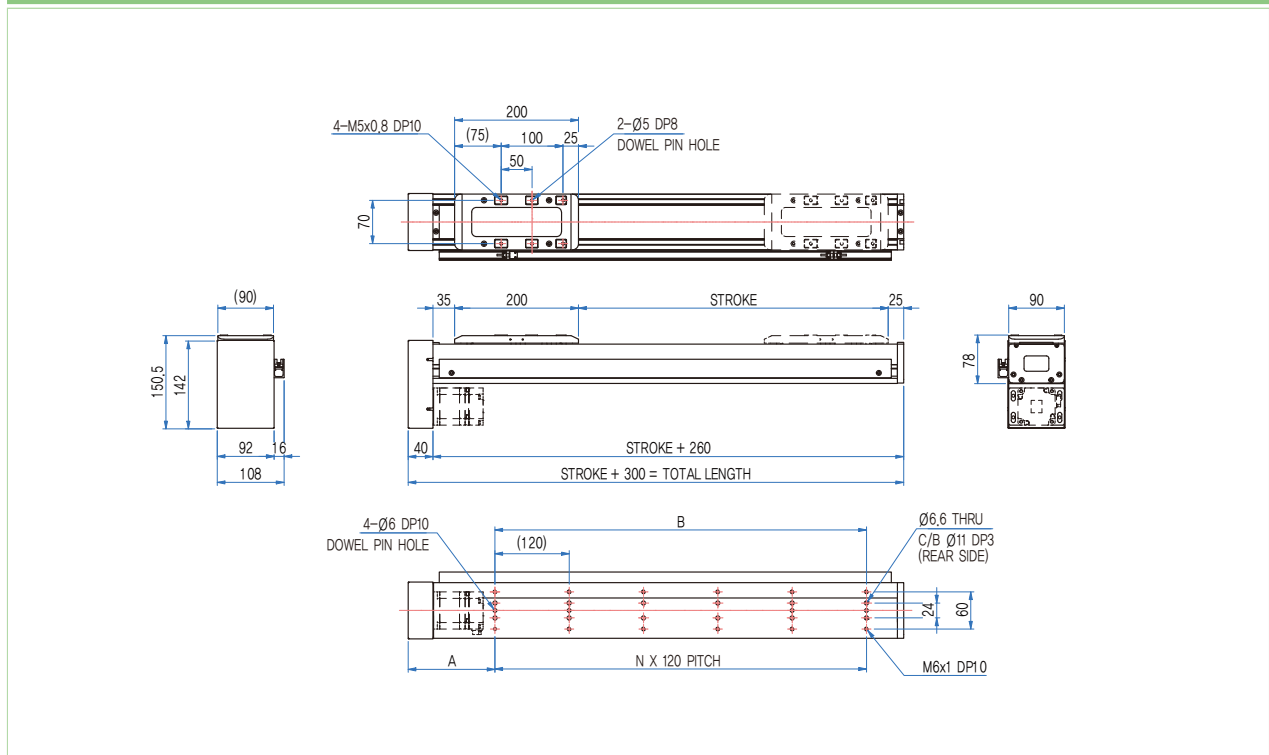
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Total Length | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| A | 180 | 180 | 180 | 165 | 180 | 180 | 180 | 180 | 180 | 200 | 200 |
| B | 120 | 240 | 360 | 480 | 480 | 600 | 720 | 840 | 960 | 960 | 1080 |
| N (EA) | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 8 | 9 |
| Weight (kg) | 3,2 | 4,5 | 5,8 | 7,1 | 8,2 | 9,3 | 10,6 | 11,9 | 13,2 | 14,5 | 15,8 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

■ External Dimension



ECR 090-L

Parallel Left

■ Dimensions Table

(mm)

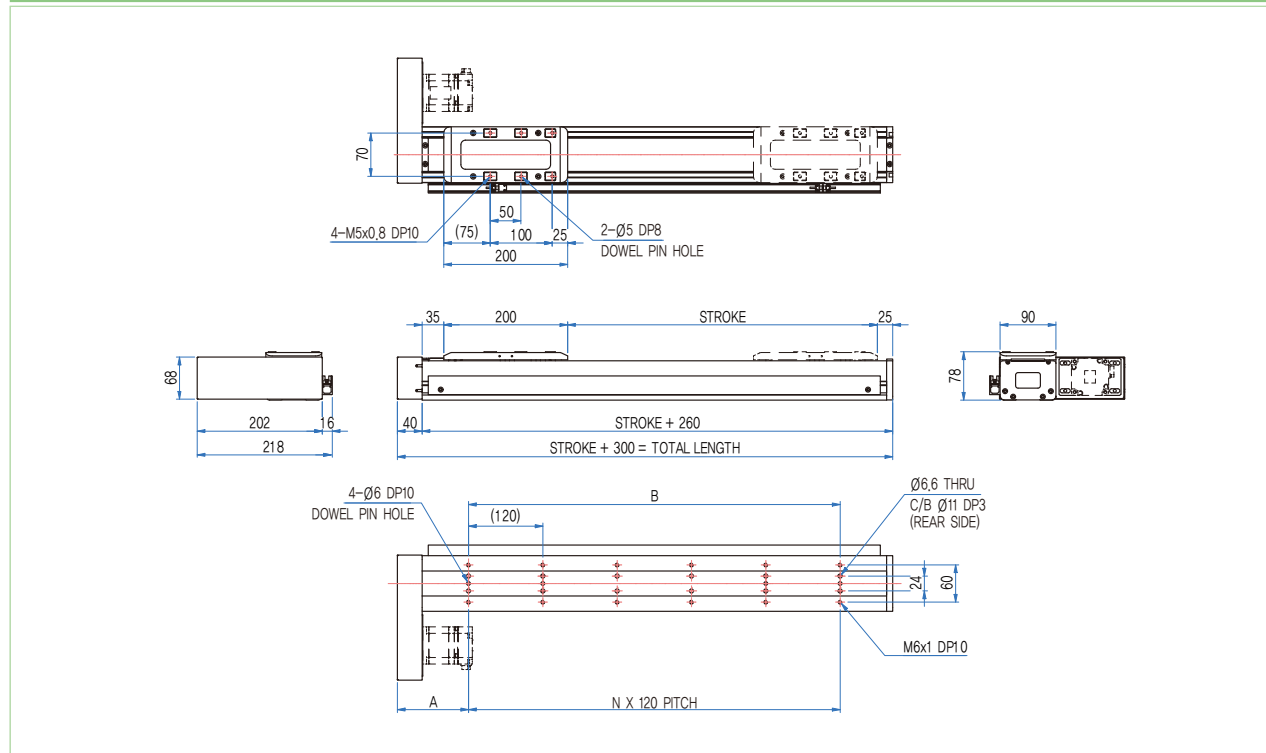
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Total Length | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| A | 140 | 140 | 120 | 120 | 120 | 120 | 100 | 140 | 140 | 140 | 120 |
| B | 120 | 240 | 360 | 480 | 600 | 720 | 840 | 840 | 960 | 1080 | 1200 |
| N (EA) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 |
| Weight (kg) | 3 | 4.3 | 5.6 | 6.9 | 8.2 | 9.5 | 10.8 | 12.1 | 13.4 | 14.7 | 16 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

■ External Dimension



ECR 090-R

Parallel Right

Dimensions Table

(mm)

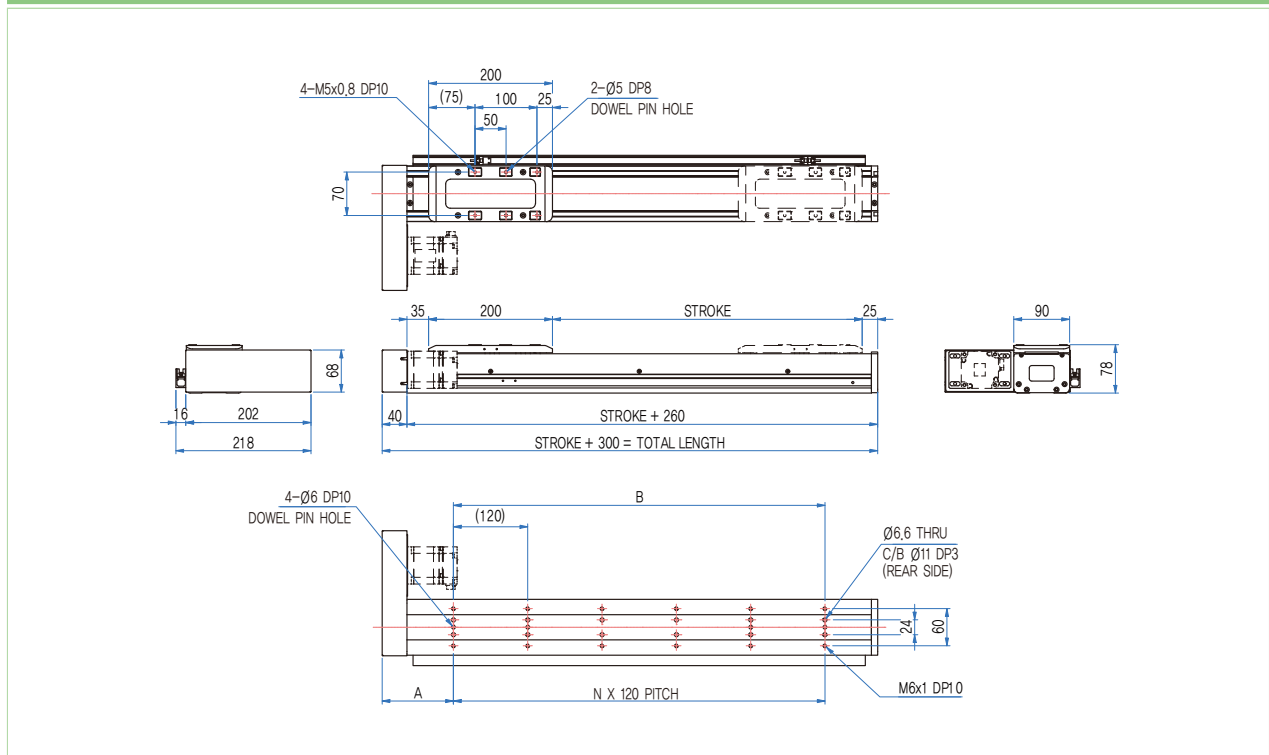
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Total Length | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| A | 140 | 140 | 120 | 120 | 120 | 120 | 100 | 140 | 140 | 140 | 120 |
| B | 120 | 240 | 360 | 480 | 600 | 720 | 840 | 840 | 960 | 1080 | 1200 |
| N (EA) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 |
| Weight (kg) | 3 | 4.3 | 5.6 | 6.9 | 8.2 | 9.5 | 10.8 | 12.1 | 13.4 | 14.7 | 16 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

External Dimension

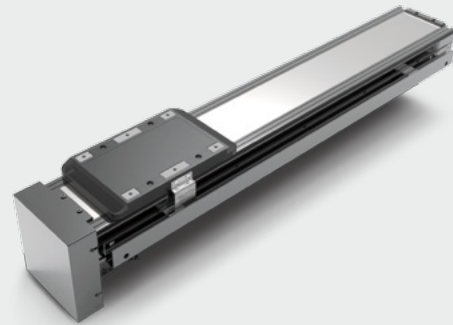


ECR 120 Series

ECR 120-S
Direct Coupled



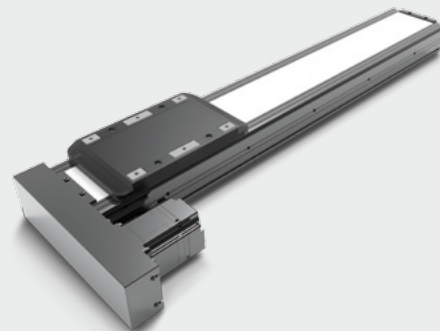
ECR 120-B
Parallel Bottom



ECR 120-L
Parallel Left



ECR 120-R
Parallel Right



Performance Specifications

| Model | ECR 120 | | | | | |
|--------------------|--------------------------------------|----|--------|-----------|----|--------|
| Motor (W) | 200 W ~ 400 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 1100 | | | 50 ~ 1100 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 2 Way 15WN - 2 BLOCK | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| | | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| ECR 120 | Ø15 | 5 | 250 mm/sec | | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | | |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|-------|
| | | | | 200W | 400W |
| ECR 120 | Ø15 | 5 | Horizontal | 50 kg | 50 kg |
| | | | Vertica | 50 kg | 50 kg |
| | | 10 | Horizontal | 50 kg | 50 kg |
| | | | Vertica | 22 kg | 38 kg |
| | | 20 | Horizontal | 28 kg | 45 kg |
| | | | Vertica | 10 kg | 20 kg |

ECR 120-S

Direct Coupled

■ Dimensions Table

(mm)

| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|------|------|------|------|------|------|------|
| Total Length | 422 | 522 | 622 | 722 | 822 | 922 | 1022 | 1122 | 1222 | 1322 | 1422 |
| A | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| B | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| N (EA) | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Weight (kg) | 4.5 | 6.1 | 7.7 | 9.3 | 10.9 | 12.5 | 14.1 | 15.7 | 17.3 | 18.9 | 20.5 |

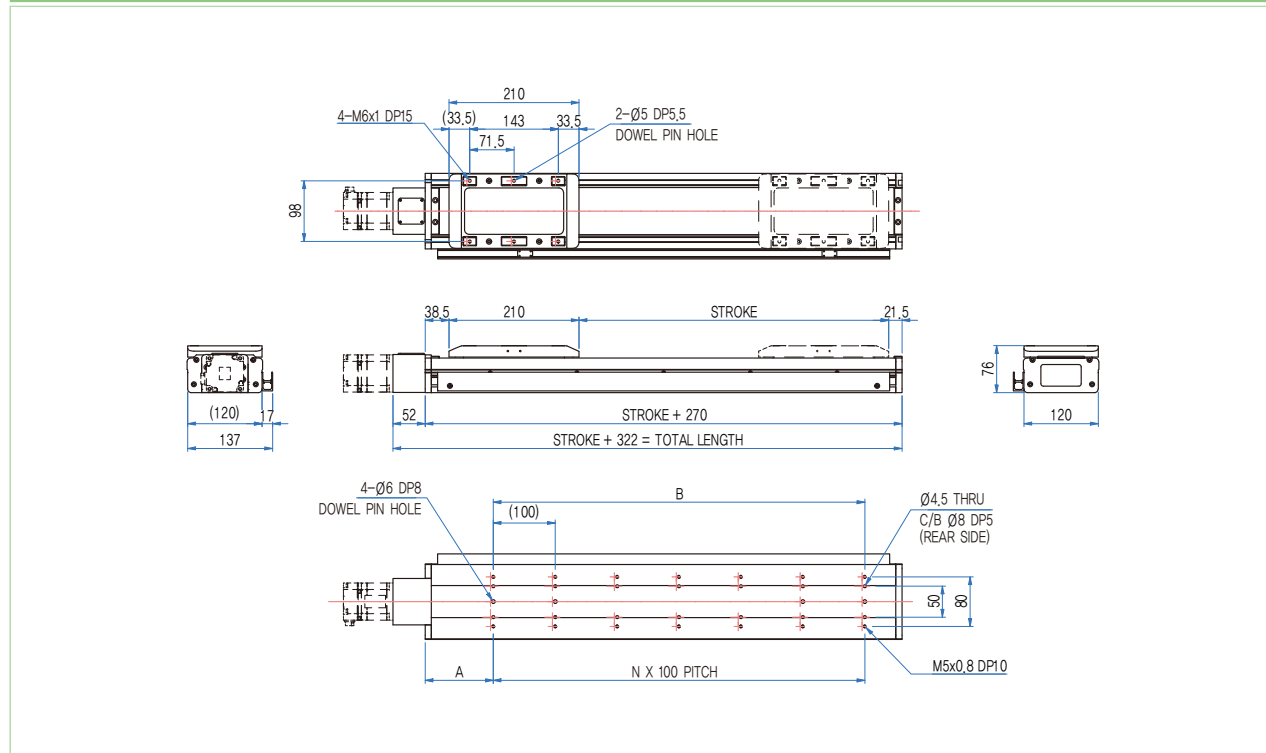
※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model |
|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-02 |
| | LS Mecapion | FBL02A |

| W | Maker | Model |
|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL04A |

■ External Dimension



ECR 120-B

Parallel Bottom

■ Dimensions Table

(mm)

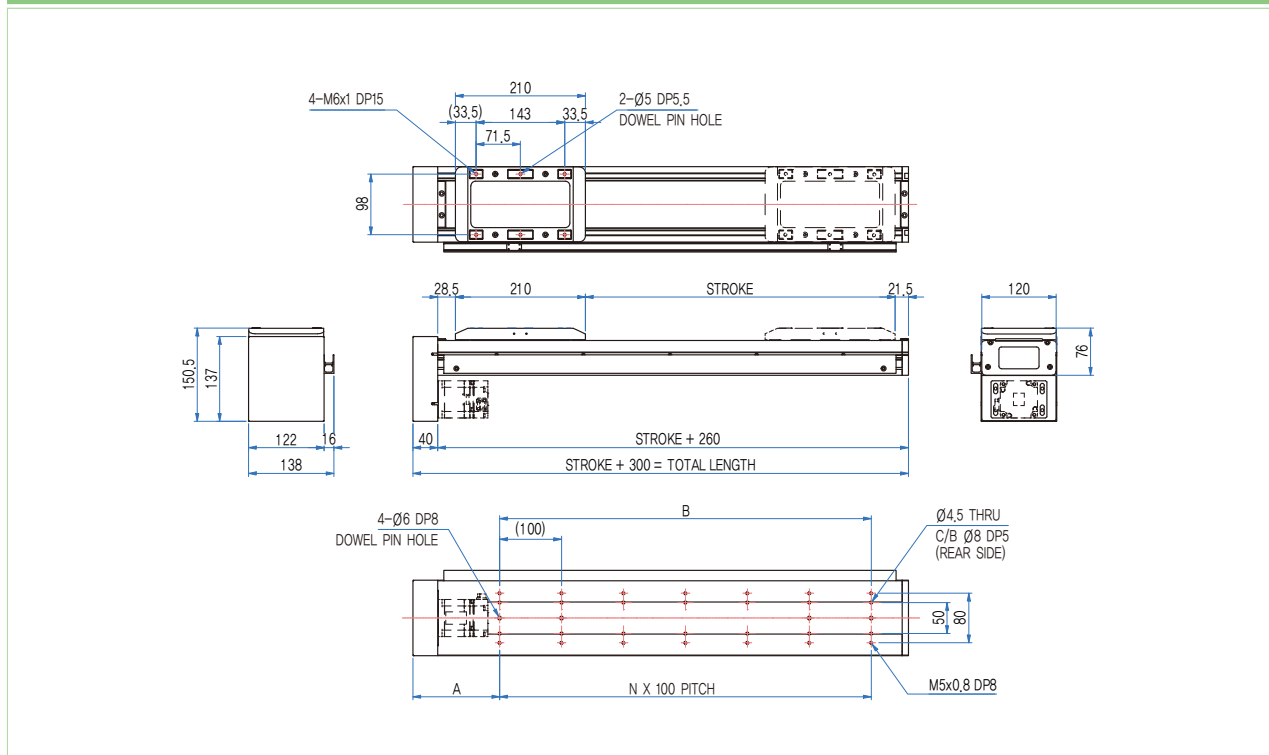
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|------|-----|------|------|------|------|------|------|
| Total Length | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| A | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| B | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| N (EA) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Weight (kg) | 5,6 | 7,2 | 8,8 | 10,4 | 12 | 13,6 | 15,2 | 16,8 | 18,4 | 20 | 21,6 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 | 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR23 | | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-02 | | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL02A | | LS Mecapion | FBL04A |

■ External Dimension



ECR 120-L

Parallel Left

■ Dimensions Table

(mm)

| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|------|-----|------|------|------|------|------|------|
| Total Length | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| A | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| B | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| N (EA) | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Weight (kg) | 5,6 | 7,2 | 8,8 | 10,4 | 12 | 13,6 | 15,2 | 16,8 | 18,4 | 20 | 21,6 |

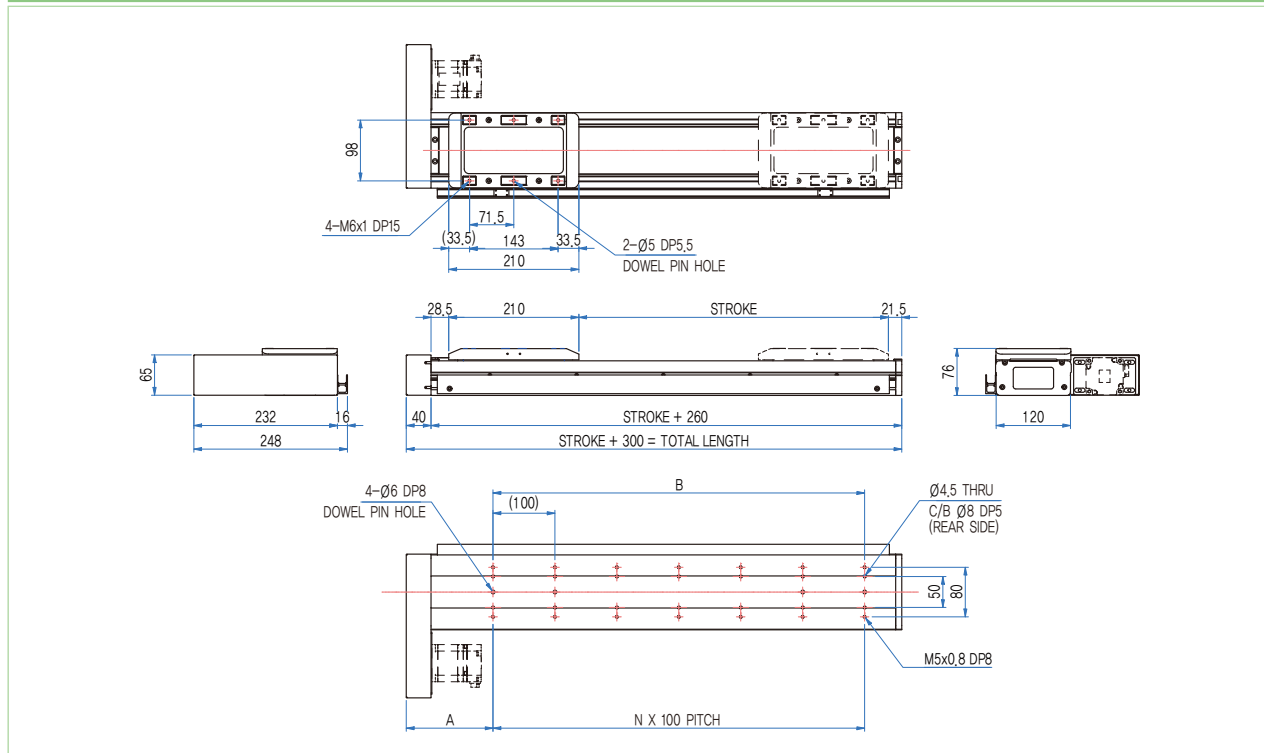
※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model |
|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-02 |
| | LS Mecapion | FBL02A |

| W | Maker | Model |
|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL04A |

■ External Dimension



ECR 120-R

Parallel Right

■ Dimensions Table

(mm)

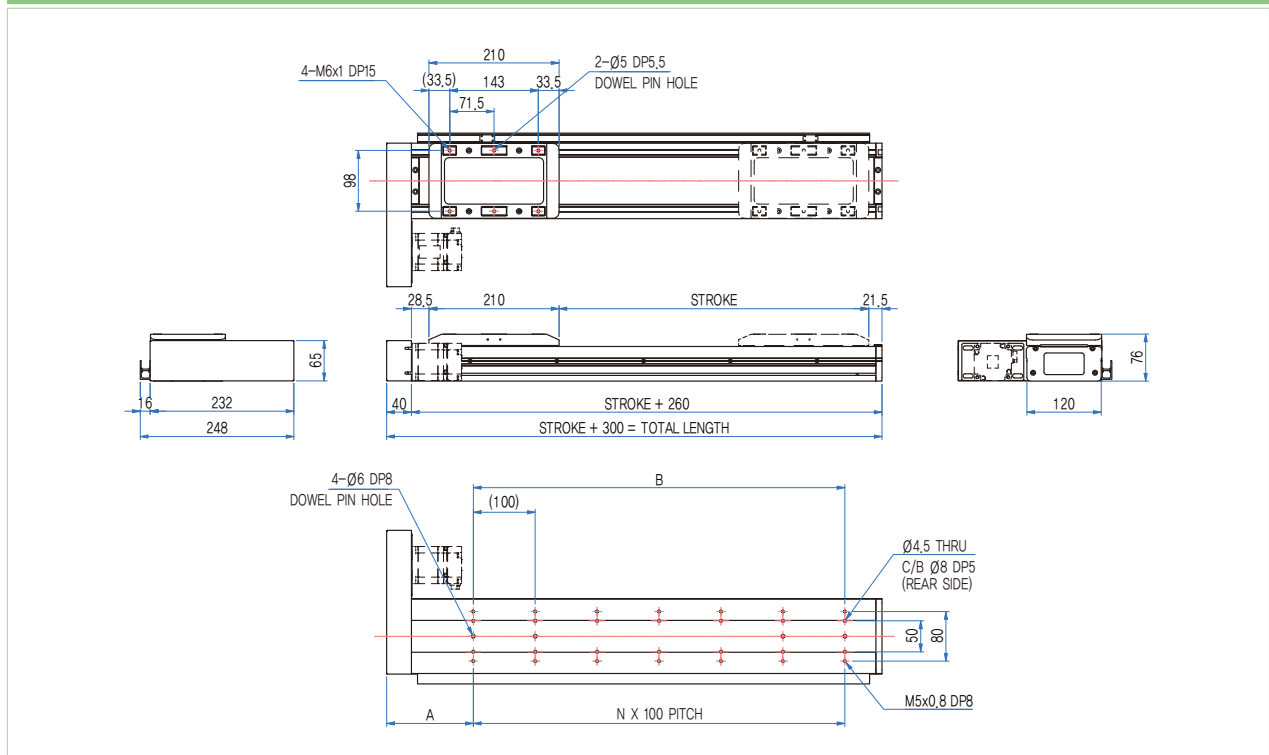
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|------|-----|------|------|------|------|------|------|
| Total Length | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| A | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| B | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| N (EA) | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Weight (kg) | 5,6 | 7,2 | 8,8 | 10,4 | 12 | 13,6 | 15,2 | 16,8 | 18,4 | 20 | 21,6 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

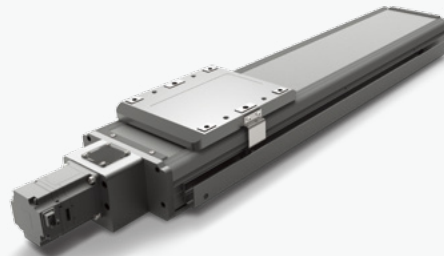
| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 | 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR23 | | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-02 | | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL02A | | LS Mecapion | FBL04A |

■ External Dimension

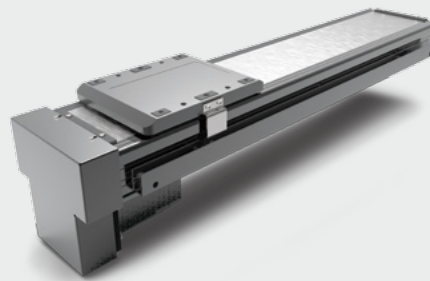


ECR 160 Series

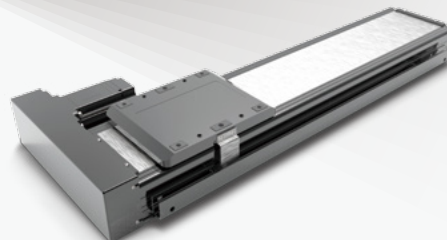
ECR 160-S
Direct Coupled



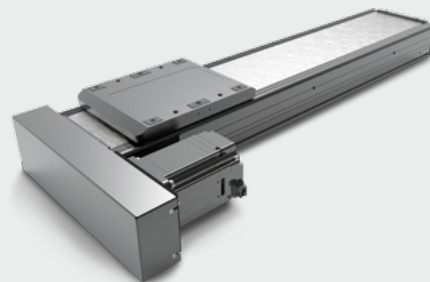
ECR 160-B
Parallel Bottom



ECR 160-L
Parallel Left



ECR 160-R
Parallel Right



Performance Specifications

| Model | ECR 160 | | | | | |
|--------------------|--------------------------------------|----|--------|-----------|----|--------|
| Motor (W) | 400 W ~ 700 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 1100 | | | 50 ~ 1100 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 2 Way 20W – 2 BLOCK | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| | | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |
| ECR 160 | Ø20 | 5 | 250 mm/sec | | | | | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | | | | | |

* (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|--------|
| | | | | 400W | 700W |
| ECR 160 | Ø20 | 5 | Horizontal | 100 kg | 100 kg |
| | | | Vertica | 60 kg | 60 kg |
| | | 10 | Horizontal | 80 kg | 80 kg |
| | | | Vertica | 40 kg | 45 kg |
| | | 20 | Horizontal | 35 kg | 70 kg |
| | | | Vertica | 20 kg | 30 kg |

ECR 160-S

Direct Coupled

■ Dimensions Table

(mm)

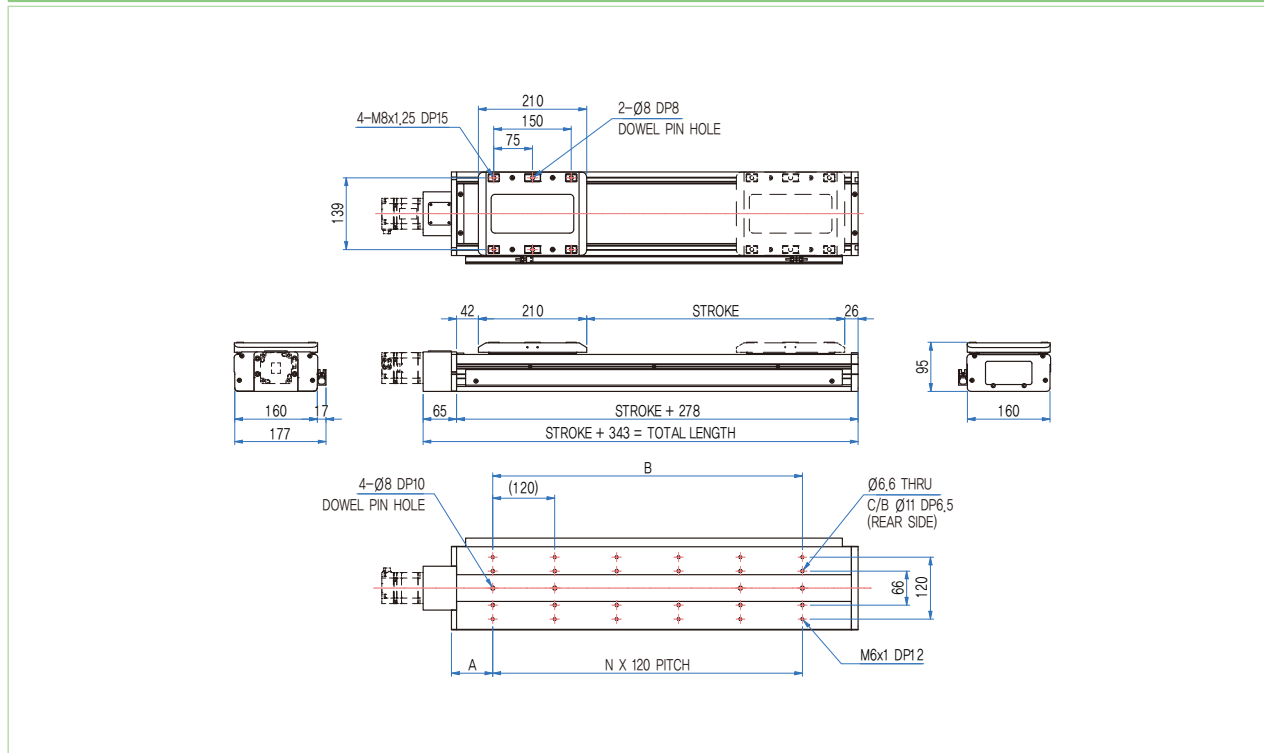
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 443 | 543 | 643 | 743 | 843 | 943 | 1043 | 1143 | 1243 | 1343 | 1443 | 1543 | 1643 | 1743 | 1843 |
| A | 70 | 70 | 100 | 100 | 80 | 80 | 80 | 70 | 100 | 100 | 100 | 100 | 100 | 80 | 70 |
| B | 240 | 360 | 360 | 480 | 600 | 720 | 840 | 960 | 960 | 1080 | 1200 | 1320 | 1440 | 1560 | 1680 |
| N (EA) | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Weight (kg) | 7.2 | 9.7 | 12.2 | 14.7 | 17.2 | 19.7 | 22.2 | 24.7 | 27.2 | 29.7 | 32.2 | 34.7 | 37.2 | 39.7 | 42.2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

■ External Dimension



ECR 160-B

Parallel Bottom

Dimensions Table

(mm)

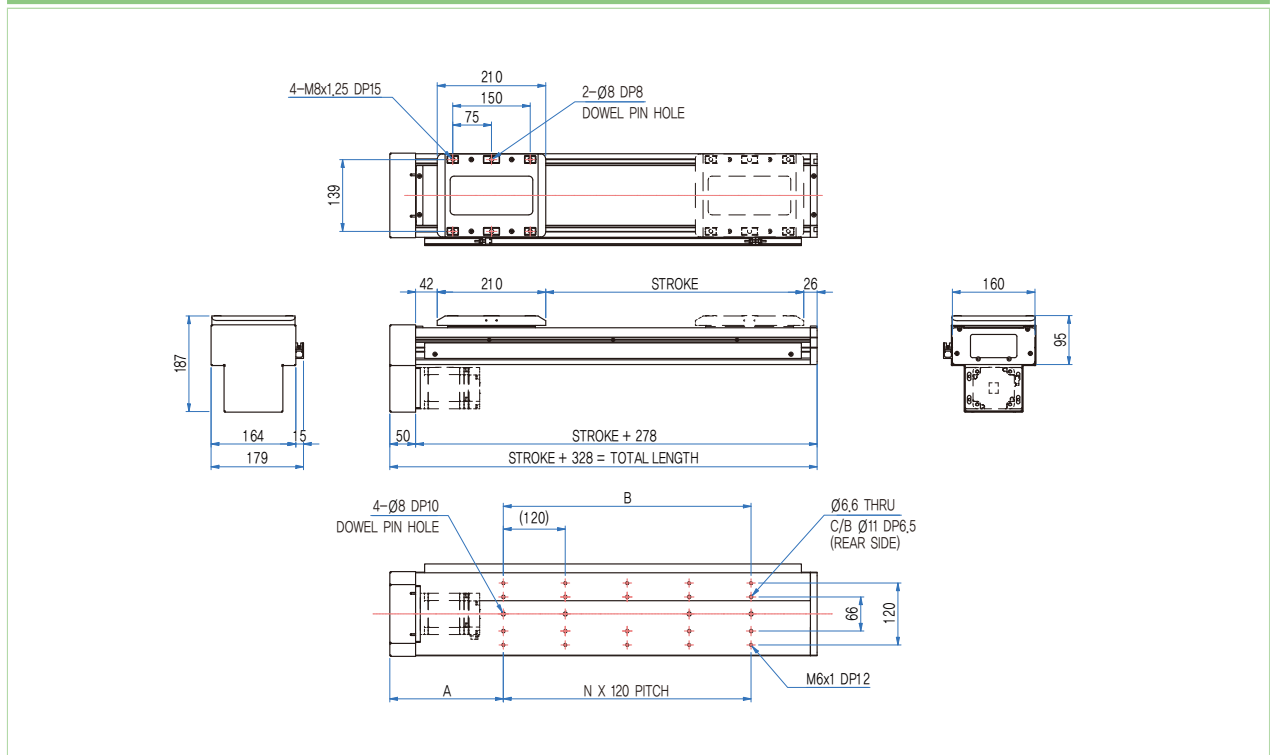
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|-----|------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|
| Total Length | 428 | 528 | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 | 1628 | 1728 | 1828 |
| A | 220 | 220 | 220 | 240 | 220 | 220 | 220 | 220 | 220 | 240 | 240 | 220 | 220 | 220 | 220 |
| B | 120 | 240 | 360 | 360 | 480 | 600 | 720 | 840 | 960 | 960 | 1080 | 1200 | 1320 | 1440 | 1560 |
| N (EA) | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 12 | 13 |
| Weight (kg) | 9 | 11,5 | 14 | 16,5 | 19 | 21,5 | 24 | 26,5 | 29 | 31,5 | 34 | 36,5 | 39 | 41,5 | 44 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

External Dimension



ECR 160-L

Parallel Left

■ Dimensions Table

(mm)

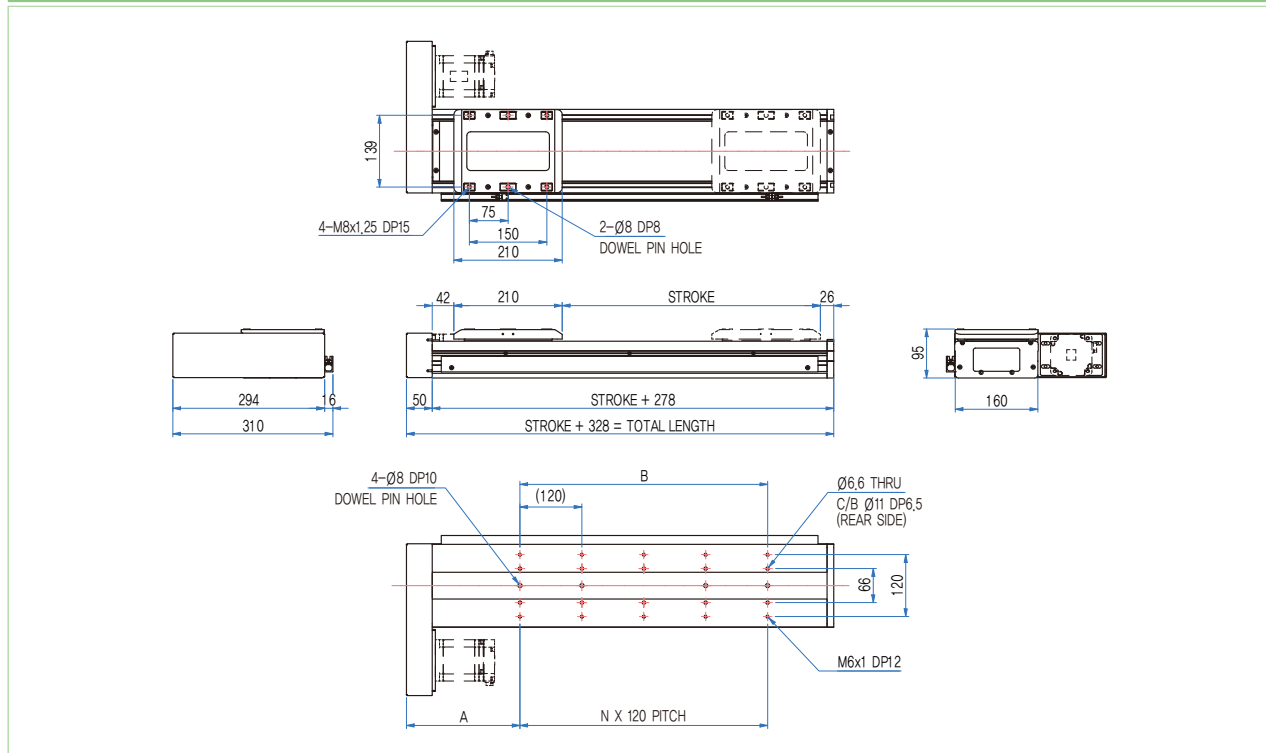
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|-----|------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|
| Total Length | 428 | 528 | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 | 1628 | 1728 | 1828 |
| A | 120 | 100 | 100 | 140 | 140 | 140 | 120 | 120 | 100 | 140 | 120 | 120 | 120 | 100 | 100 |
| B | 240 | 360 | 480 | 480 | 600 | 720 | 840 | 960 | 1080 | 1080 | 1200 | 1320 | 1440 | 1560 | 1680 |
| N (EA) | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 |
| Weight (kg) | 9 | 11,5 | 14 | 16,5 | 19 | 21,5 | 24 | 26,5 | 29 | 31,5 | 34 | 36,5 | 39 | 41,5 | 44 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

■ External Dimension



ECR 160-R

Parallel Right

Dimensions Table

(mm)

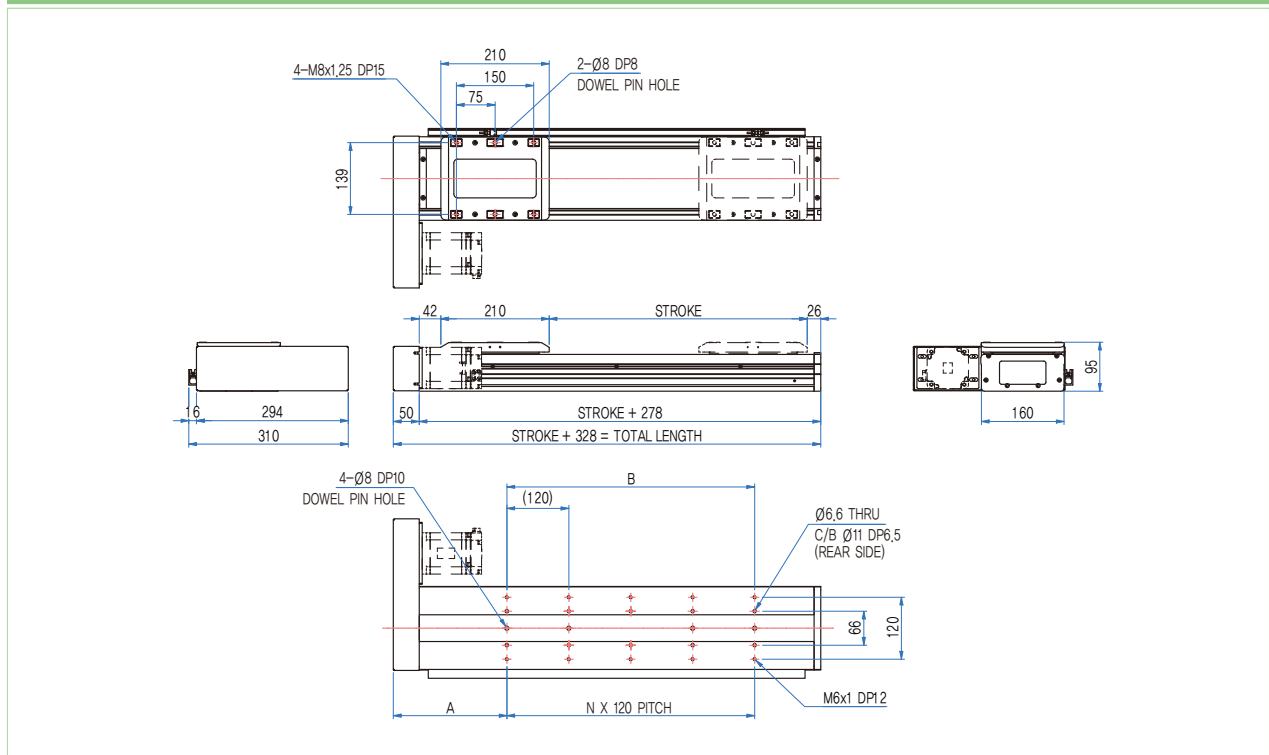
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|-----|------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|
| Total Length | 428 | 528 | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 | 1628 | 1728 | 1828 |
| A | 120 | 100 | 100 | 140 | 140 | 140 | 120 | 120 | 100 | 140 | 120 | 120 | 120 | 100 | 100 |
| B | 240 | 360 | 480 | 480 | 600 | 720 | 840 | 960 | 1080 | 1080 | 1200 | 1320 | 1440 | 1560 | 1680 |
| N (EA) | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 |
| Weight (kg) | 9 | 11.5 | 14 | 16.5 | 19 | 21.5 | 24 | 26.5 | 29 | 31.5 | 34 | 36.5 | 39 | 41.5 | 44 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

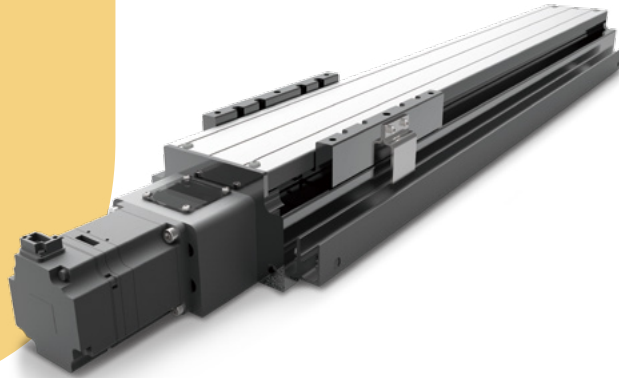
| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

External Dimension



개방형 BALL SCREW TYPE ROBOT

ESR Series 소개



ESR 070 - S - 0050 - 20 - 050 A - A - W

1

2

3

4

5

6

7

8

| | | | | | | | |
|---|-----------------|-----------------|--------|---------------|---------------|-----------|---------|
| 1 | Base Width (mm) | 070 | 무설치 | : Blank | | | |
| | | 090 | | | | | |
| | | 120 | | | | | |
| | | 160 | | | | | |
| 2 | Motor Shape | Direct Coupled | : S | 50W Brake | : 05B | | |
| | | Parallel Bottom | : B | 100W Brake | : 10B | | |
| | | Parallel Left | : L | 200W Brake | : 20B | | |
| | | Parallel Right | : R | 400W Brake | : 40B | | |
| 3 | Stroke (mm) | 50 | : 0050 | 750W | : 75B | | |
| | | 100 | : 0100 | | | | |
| | | 150 | : 0150 | | | | |
| | | : | | | | | |
| | | 500 | : 0500 | | | | |
| 4 | Ball Screw Lead | 5 | : 05 | 6 | Motor Maker | Panasonic | : A |
| | | 10 | : 10 | Yaskawa | | : B | |
| | | 15 | : 15 | Mitsubishi | | : C | |
| | | 20 | : 20 | Bosch Rexroth | | : D | |
| 5 | Motor Capacity | | | 7 | Sensor Option | 무설치 | : Blank |
| | | | | PM-Y65 | | : A | |
| | | | | PM-L25 | | : B | |
| | | | | EE-XX672 | | : C | |
| | | | | EE-XX674 | | : D | |
| 6 | Motor Capacity | | | EE-XX677 | : E | | |
| | | | | | | | |
| 7 | Sensor Option | | | 8 | Robot Color | White | : W |
| | | | | Black | | : B | |

■ ESR Series



ELS SERIES

ECR SERIES

ESR SERIES

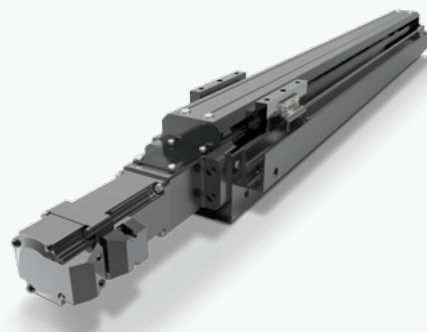
COMBINATION

VS SERIES

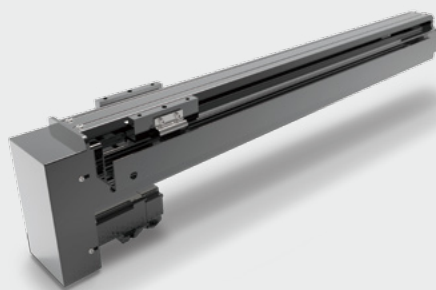
MS SERIES

ESR 070 Series

ESR 070-S
Direct Coupled



ESR 070-B
Parallel Bottom



ESR 070-L
Parallel Left



ESR 070-R
Parallel Right



Performance Specifications

| Model | ESR 070 | | | | | |
|--------------------|--------------------------------------|----|--------|----------|----|--------|
| Motor (W) | 50 W ~ 100 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 500 | | | 50 ~ 500 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 1 Way 24 – 1 Block | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| ESR 070 | Ø12 | 5 | 250 mm/sec | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|-------|
| | | | | 50W | 100W |
| ESR 070 | Ø12 | 5 | Horizontal | 8 kg | 12 kg |
| | | | Vertica | 6 kg | 9 kg |
| | | 10 | Horizontal | 5 kg | 10 kg |
| | | | Vertica | 3 kg | 7 kg |
| | | 20 | Horizontal | 3 kg | 6 kg |
| | | | Vertica | 2 kg | 4 kg |

ESR 070-S

Direct Coupled

■ Dimensions Table

(mm)

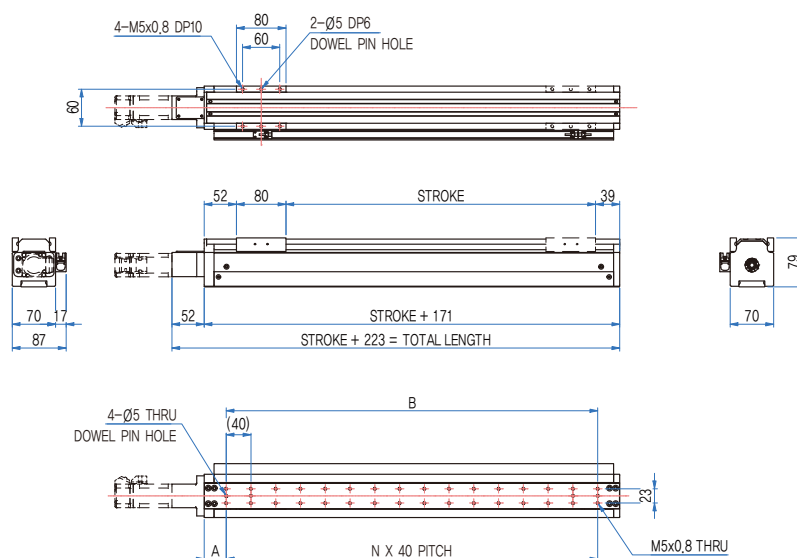
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 273 | 323 | 373 | 423 | 473 | 523 | 573 | 623 | 673 | 723 |
| A | 30,5 | 35,5 | 35,5 | 25,5 | 30,5 | 35,5 | 45,5 | 25,5 | 30,5 | 35,5 |
| B | 160 | 200 | 240 | 320 | 360 | 400 | 440 | 520 | 560 | 600 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 13 | 14 | 15 |
| Weight (kg) | 2,7 | 3,2 | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

■ External Dimension



ESR 070-B

Parallel Bottom

■ Dimensions Table

(mm)

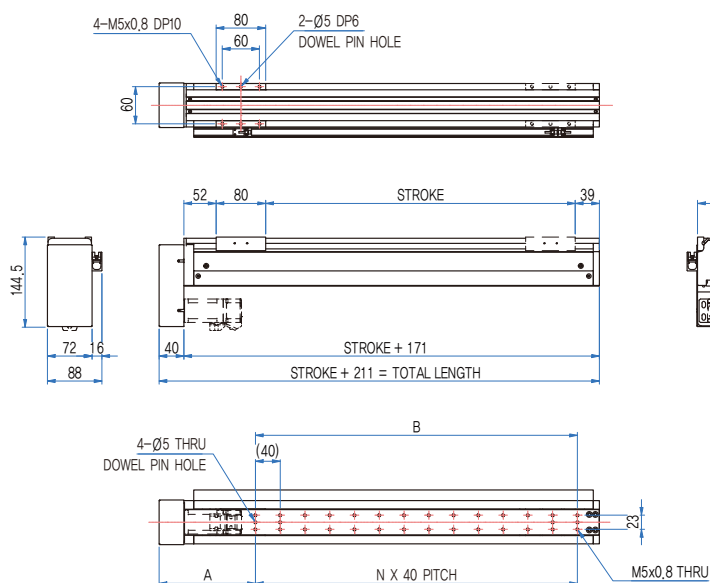
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Total Length | 261 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 |
| A | 70,5 | 75,5 | 80,5 | 85,5 | 90,5 | 95,5 | 100,5 | 105,5 | 110,5 | 115,5 |
| B | 160 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 520 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 14 | 15 |
| Weight (kg) | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 | 7,7 | 8,2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

■ External Dimension



ESR 070-L

Parallel Left

■ Dimensions Table

(mm)

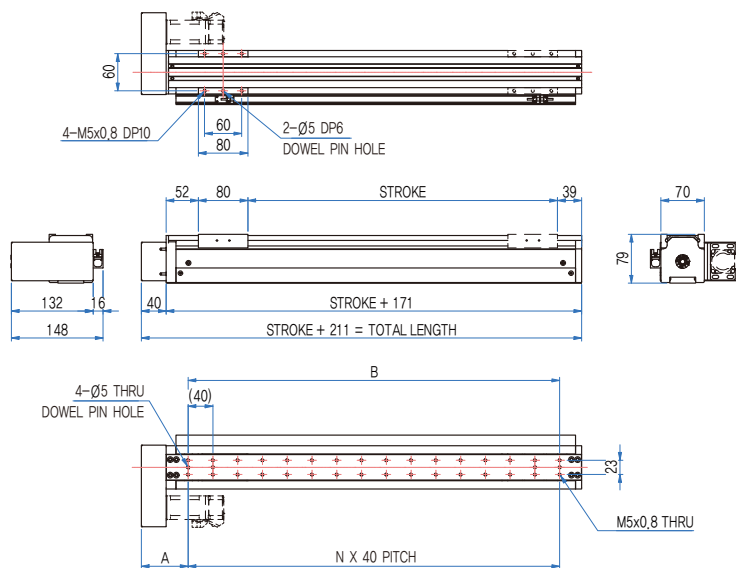
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Total Length | 261 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 |
| A | 70,5 | 75,5 | 80,5 | 85,5 | 90,5 | 95,5 | 100,5 | 105,5 | 110,5 | 115,5 |
| B | 160 | 200 | 240 | 320 | 360 | 400 | 440 | 480 | 560 | 600 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 14 | 15 |
| Weight (kg) | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 | 7,7 | 8,2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

■ External Dimension



ESR 070-R

Parallel Right

■ Dimensions Table

(mm)

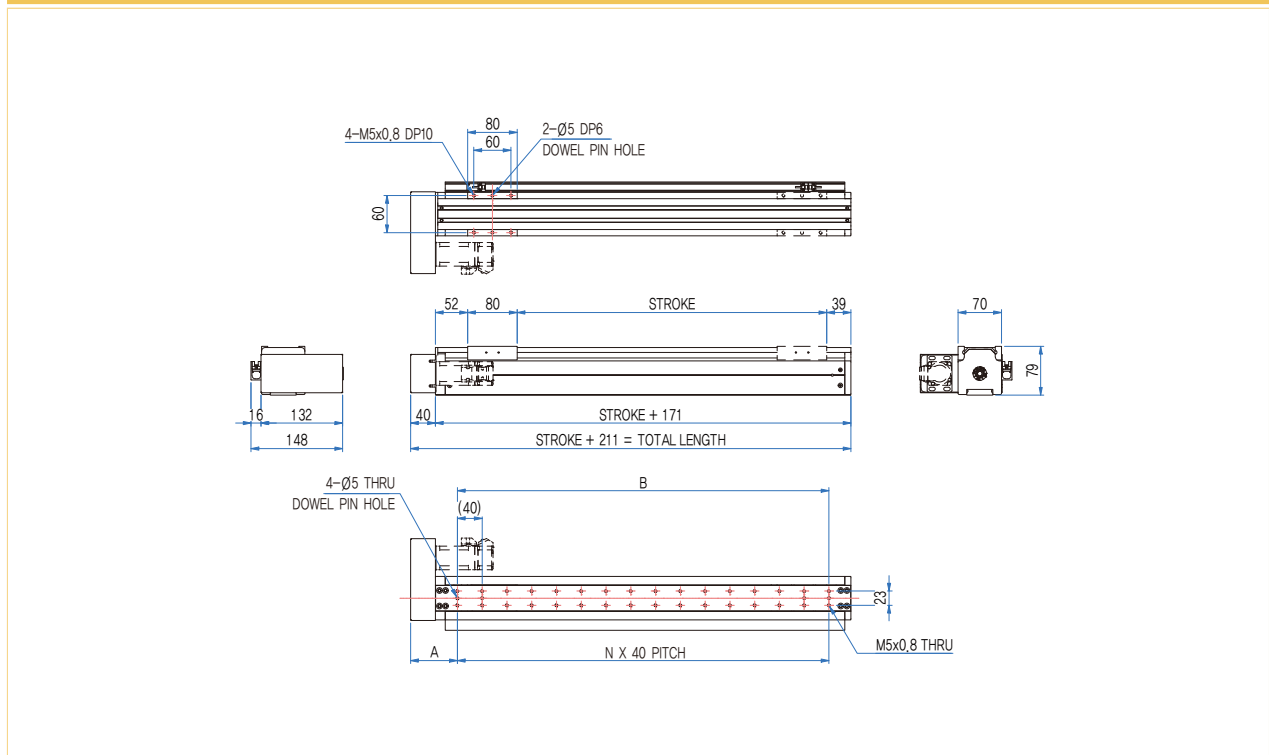
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Total Length | 261 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 |
| A | 70,5 | 75,5 | 80,5 | 85,5 | 90,5 | 95,5 | 100,5 | 105,5 | 110,5 | 115,5 |
| B | 160 | 200 | 240 | 280 | 320 | 360 | 400 | 440 | 480 | 520 |
| N (EA) | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 14 | 15 |
| Weight (kg) | 3,7 | 4,2 | 4,7 | 5,2 | 5,7 | 6,2 | 6,7 | 7,2 | 7,7 | 8,2 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

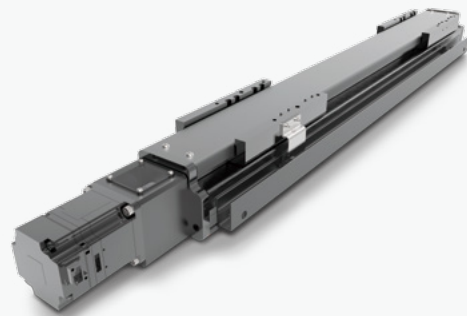
| W | Maker | Model | W | Maker | Model |
|-----|-------------|-----------------|------|-------------|-----------------|
| 50W | Panasonic | MSMD5A / MSMF5A | 100W | Panasonic | MSMD01 / MSMF01 |
| | Mitsubishi | HG-KR053 | | Mitsubishi | HG-KR13 |
| | Yaskawa | SGM7J-A5 | | Yaskawa | SGM7J-01 |
| | LS Mecapion | FALR5A | | LS Mecapion | FAL01A |

■ External Dimension

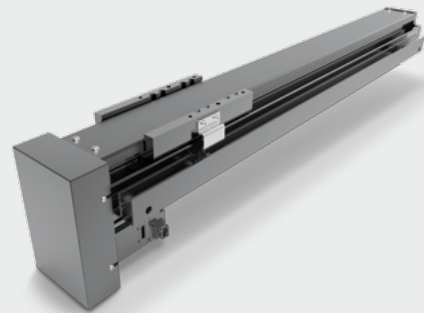


ESR 090 Series

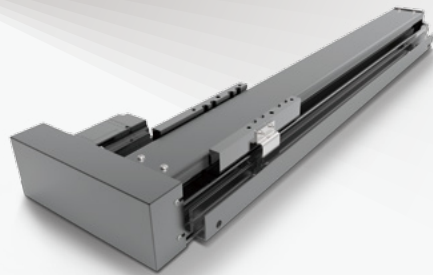
ESR 090-S
Direct Coupled



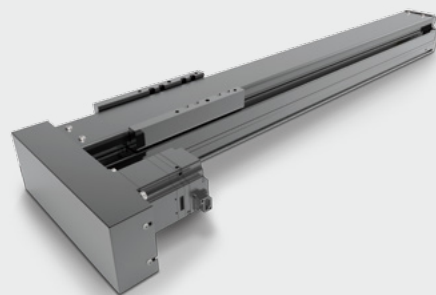
ESR 090-B
Parallel Bottom



ESR 090-L
Parallel Left



ESR 090-R
Parallel Right



Performance Specifications

| Model | ESR 090 | | | | | |
|--------------------|--------------------------------------|----|--------|----------|----|--------|
| Motor (W) | 100 W ~ 400 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 500 | | | 50 ~ 500 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 2 Way 12WN – 2 BLOCK | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| | | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| ESR 090 | Ø15 | 5 | 250 mm/sec | | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | | |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|-------|
| | | | | 100W | 200W |
| ESR 090 | Ø15 | 5 | Horizontal | 30 kg | 30 kg |
| | | | Vertica | 22 kg | 26 kg |
| | | 10 | Horizontal | 12 kg | 30 kg |
| | | | Vertica | 8 kg | 16 kg |
| | | 20 | Horizontal | 4 kg | 28 kg |
| | | | Vertica | 2 kg | 8 kg |

ESR 090-S

Direct Coupled

Dimensions Table

(mm)

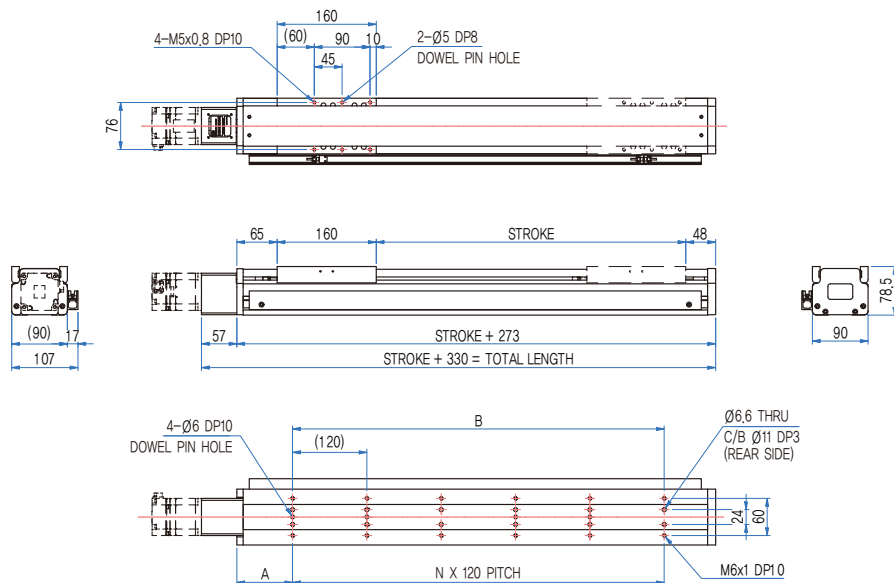
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Total Length | 430 | 530 | 630 | 730 | 830 | 930 | 1030 | 1130 | 1230 | 1330 | 1430 |
| A | 65 | 115 | 105 | 95 | 85 | 85 | 65 | 115 | 105 | 95 | 85 |
| B | 240 | 240 | 360 | 480 | 600 | 720 | 840 | 840 | 960 | 1080 | 1200 |
| N (EA) | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 |
| Weight (kg) | 4.3 | 5.3 | 6.3 | 7.3 | 8.3 | 9.3 | 10.3 | 11.3 | 12.3 | 13.3 | 14.3 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

External Dimension



ESR 090-B

Parallel Bottom

■ Dimensions Table

(mm)

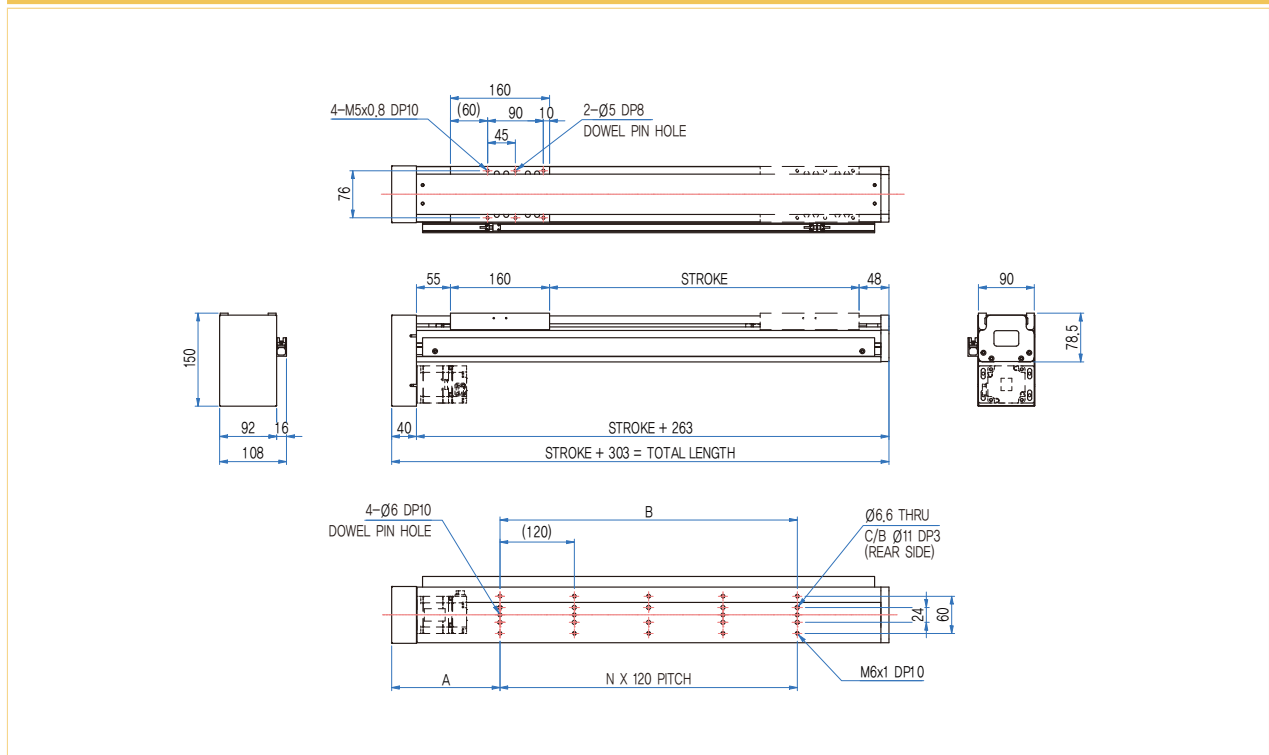
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Total Length | 403 | 503 | 603 | 703 | 803 | 903 | 1003 | 1103 | 1203 | 1303 | 1403 |
| A | 180 | 180 | 180 | 165 | 180 | 180 | 180 | 180 | 180 | 200 | 200 |
| B | 120 | 240 | 360 | 480 | 480 | 600 | 720 | 840 | 960 | 960 | 1080 |
| N (EA) | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 8 | 9 |
| Weight (kg) | 4 | 5.3 | 6.6 | 7.9 | 9.2 | 10.5 | 11.8 | 13.1 | 14.4 | 15.7 | 17 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

■ External Dimension



ESR 090-L

Parallel Left

■ Dimensions Table

(mm)

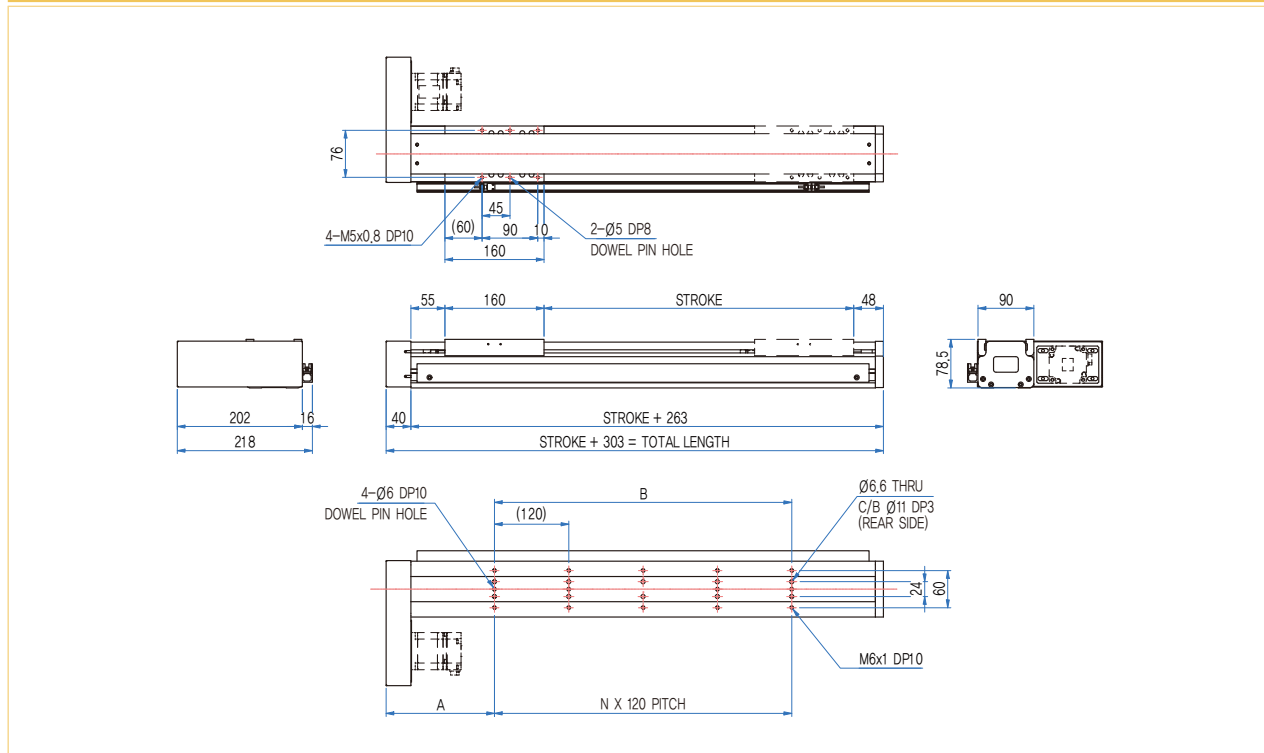
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Total Length | 403 | 503 | 603 | 703 | 803 | 903 | 1003 | 1103 | 1203 | 1303 | 1403 |
| A | 140 | 140 | 120 | 120 | 120 | 120 | 100 | 140 | 140 | 140 | 120 |
| B | 120 | 240 | 360 | 480 | 600 | 720 | 840 | 840 | 960 | 1080 | 1200 |
| N (EA) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 |
| Weight (kg) | 4 | 5.3 | 6.6 | 7.9 | 9.2 | 10.5 | 11.8 | 13.1 | 14.4 | 15.7 | 17 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

■ External Dimension



ESR 090-R

Parallel Right

Dimensions Table

(mm)

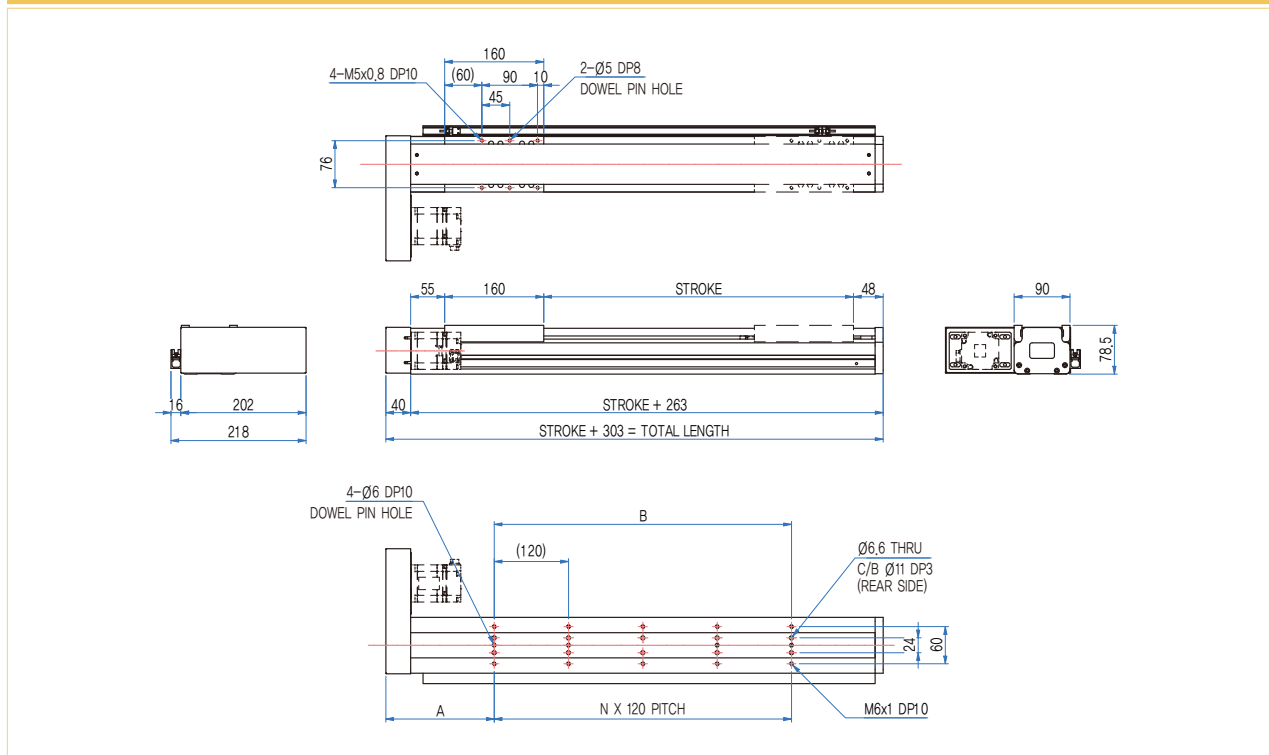
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Total Length | 403 | 503 | 603 | 703 | 803 | 903 | 1003 | 1103 | 1203 | 1303 | 1403 |
| A | 140 | 140 | 120 | 120 | 120 | 120 | 100 | 140 | 140 | 140 | 120 |
| B | 120 | 240 | 360 | 480 | 600 | 720 | 840 | 840 | 960 | 1080 | 1200 |
| N (EA) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 |
| Weight (kg) | 4 | 5.3 | 6.6 | 7.9 | 9.2 | 10.5 | 11.8 | 13.1 | 14.4 | 15.7 | 17 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

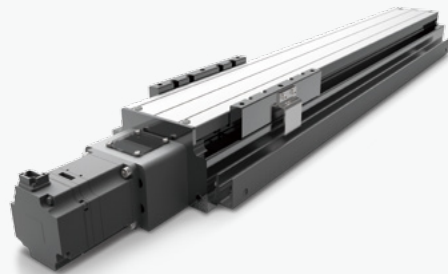
| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 100W | Panasonic | MSMD01 / MSMF01 | 200W | Panasonic | MSMD02 / MSMF02 |
| | Mitsubishi | HG-KR13 | | Mitsubishi | HG-KR23 |
| | Yaskawa | SGM7J-01 | | Yaskawa | SGM7J-02 |
| | LS Mecapion | FAL01A | | LS Mecapion | FBL02A |

External Dimension

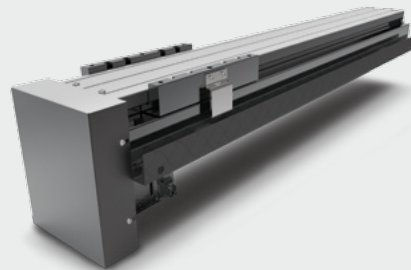


ESR 120 Series

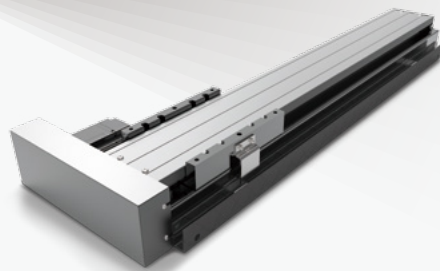
ESR 120-S
Direct Coupled



ESR 120-B
Parallel Bottom



ESR 120-L
Parallel Left



ESR 120-R
Parallel Right



Performance Specifications

| Model | ESR 120 | | | | | |
|--------------------|--------------------------------------|----|-------|---------|----|-------|
| Motor (W) | 200W ~ 400W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50~1100 | | | 50~1100 | | |
| Repeatability (mm) | ±0.02 | | ±0.01 | ±0.02 | | ±0.01 |
| LM Guide | 2 Way 15W – 2 BLOCK | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| | | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| ESR 120 | Ø15 | 5 | 250 mm/sec | | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | | |

* (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|-------|
| | | | | 200W | 400W |
| ESR 120 | Ø15 | 5 | Horizontal | 50 kg | 50 kg |
| | | | Vertica | 50 kg | 50 kg |
| | | 10 | Horizontal | 50 kg | 50 kg |
| | | | Vertica | 22 kg | 38 kg |
| | | 20 | Horizontal | 28 kg | 45 kg |
| | | | Vertica | 10 kg | 20 kg |

ESR 120-S

Direct Coupled

■ Dimensions Table

(mm)

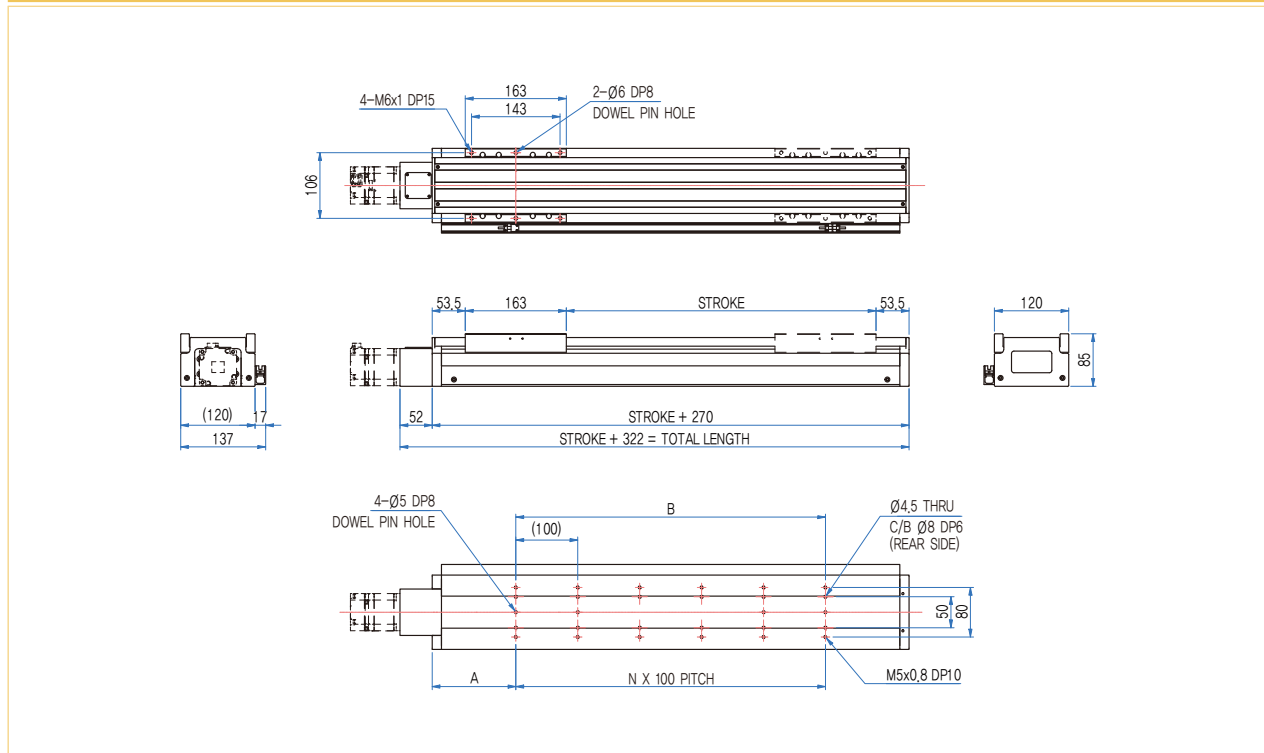
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|-----|------|------|------|------|------|------|------|
| Total Length | 422 | 522 | 622 | 722 | 822 | 922 | 1022 | 1122 | 1222 | 1322 | 1422 |
| A | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| B | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| N (EA) | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Weight (kg) | 4,9 | 6,2 | 7,5 | 8,8 | 10,1 | 11,4 | 12,7 | 14 | 15,3 | 16,6 | 17,9 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 | 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR23 | | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-02 | | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL02A | | LS Mecapion | FBL04A |

■ External Dimension



ESR 120-B

Parallel Bottom

■ Dimensions Table

(mm)

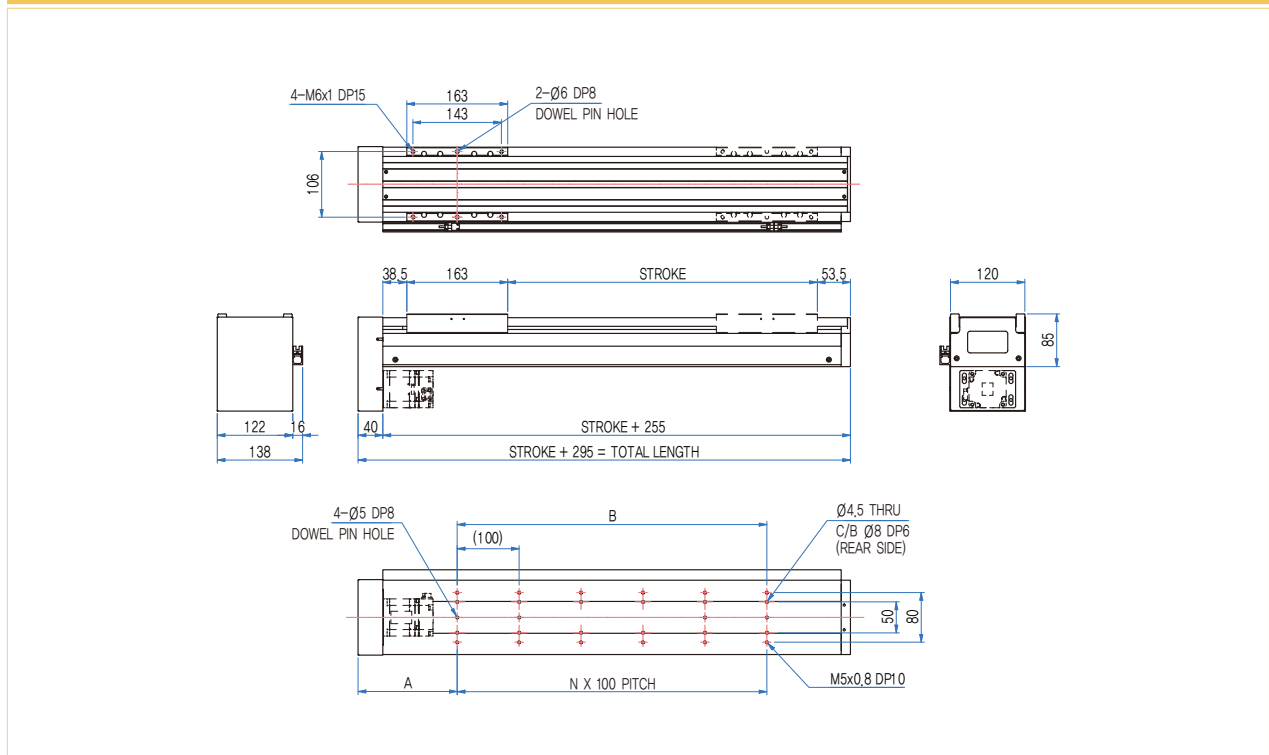
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|------|------|-----|------|------|------|------|------|
| Total Length | 395 | 495 | 595 | 695 | 795 | 895 | 995 | 1095 | 1195 | 1295 | 1395 |
| A | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| B | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| N (EA) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Weight (kg) | 6.5 | 7.8 | 9.1 | 10.4 | 11.7 | 13 | 14.3 | 15.6 | 16.9 | 18.2 | 19.5 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 | 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR23 | | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-02 | | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL02A | | LS Mecapion | FBL04A |

■ External Dimension



ESR 120-L

Parallel Left

■ Dimensions Table

(mm)

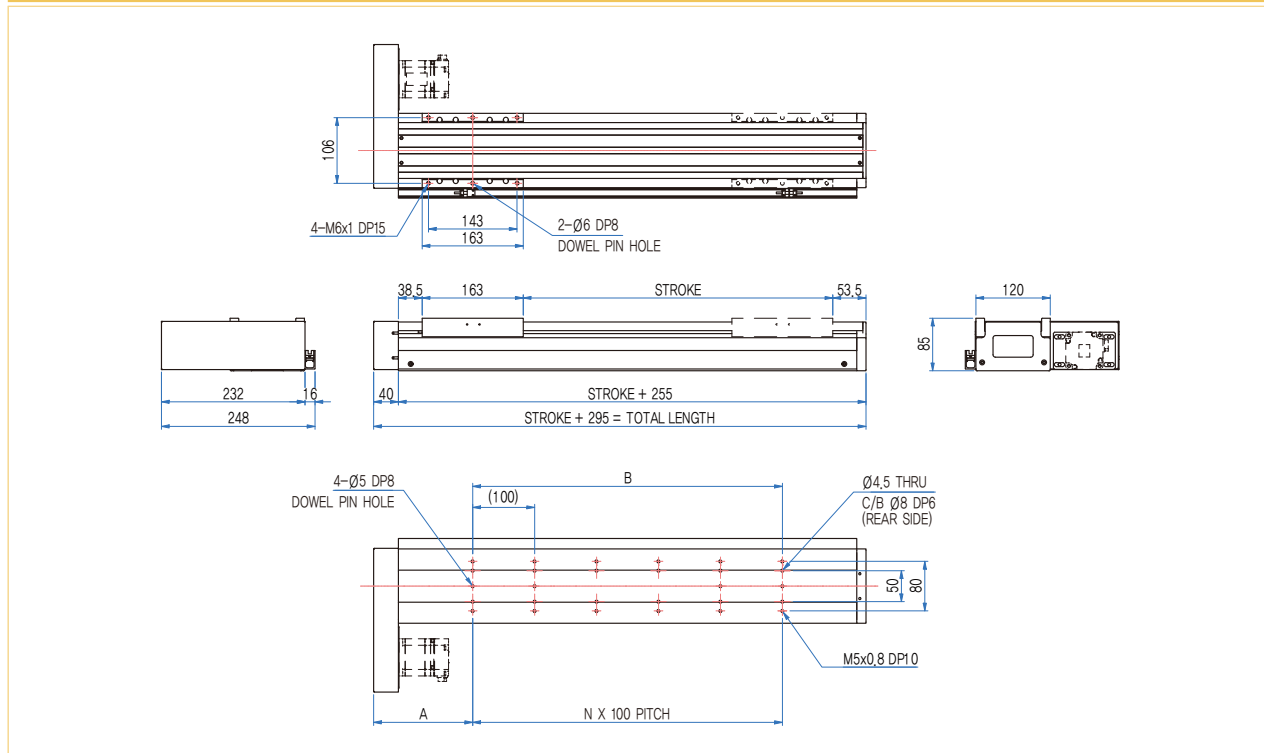
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|------|------|-----|------|------|------|------|------|
| Total Length | 395 | 495 | 595 | 695 | 795 | 895 | 995 | 1095 | 1195 | 1295 | 1395 |
| A | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| B | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| N (EA) | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Weight (kg) | 6.5 | 7.8 | 9.1 | 10.4 | 11.7 | 13 | 14.3 | 15.6 | 16.9 | 18.2 | 19.5 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 | 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR23 | | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-02 | | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL02A | | LS Mecapion | FBL04A |

■ External Dimension



ESR 120-R

Parallel Right

■ Dimensions Table

(mm)

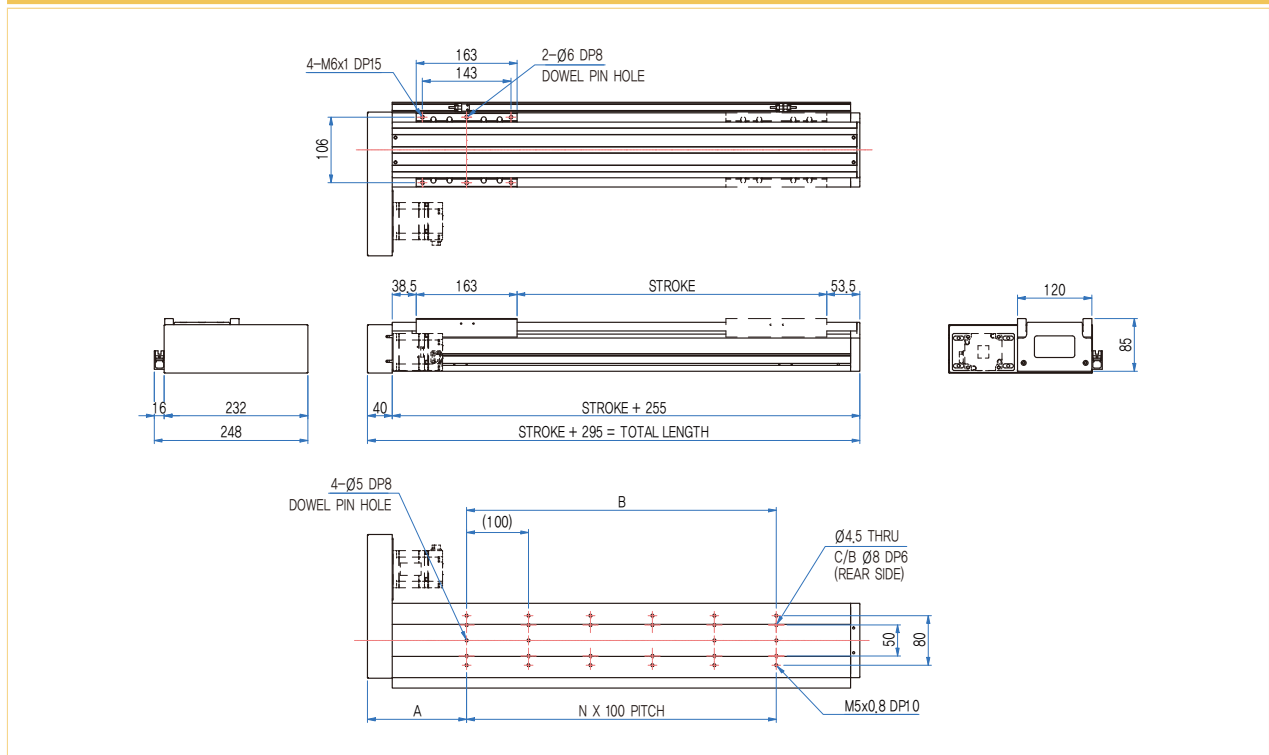
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
|--------------|-----|-----|-----|------|------|-----|------|------|------|------|------|
| Total Length | 395 | 495 | 595 | 695 | 795 | 895 | 995 | 1095 | 1195 | 1295 | 1395 |
| A | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| B | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 |
| N (EA) | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Weight (kg) | 6.5 | 7.8 | 9.1 | 10.4 | 11.7 | 13 | 14.3 | 15.6 | 16.9 | 18.2 | 19.5 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

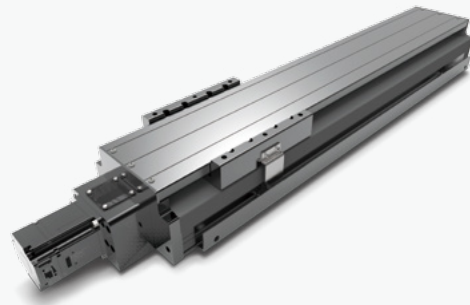
| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 200W | Panasonic | MSMD02 / MSMF02 | 400W | Panasonic | MSMD04 / MSMF04 |
| | Mitsubishi | HG-KR23 | | Mitsubishi | HG-KR43 |
| | Yaskawa | SGM7J-02 | | Yaskawa | SGM7J-04 |
| | LS Mecapion | FBL02A | | LS Mecapion | FBL04A |

■ External Dimension



ESR 160 Series

ESR 160-S
Direct Coupled



ESR 160-B
Parallel Bottom



ESR 160-L
Parallel Left



ESR 160-R
Parallel Right



Performance Specifications

| Model | ESR 160 | | | | | |
|--------------------|--------------------------------------|----|--------|-----------|----|--------|
| Motor (W) | 400 W ~ 700 W | | | | | |
| Ball Screw Lead | 5 | 10 | 20 | 5 | 10 | 20 |
| Stroke (mm) | 50 ~ 1100 | | | 50 ~ 1100 | | |
| Repeatability (mm) | ± 0.02 | | ± 0.01 | ± 0.02 | | ± 0.01 |
| LM Guide | 2 Way 20W – 2 BLOCK | | | | | |
| Body Color | Black or White | | | | | |
| Accessory | Cable, Vayor, Bracket & Driver, etc. | | | | | |

Stroke By Max Speed

| Model | Ball Screw | Lead | Stroke | | | | | | | | | | | | | | | |
|---------|------------|------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|--|
| | | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | |
| ESR 160 | Ø20 | 5 | 250 mm/sec | | | | | | | | | | | | | | | |
| | | 10 | 500 mm/sec | | | | | | | | | | | | | | | |
| | | 20 | 1000 mm/sec | | | | | | | | | | | | | | | |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Max Payload

| Model | Ball Screw | Lead | Mount | Motor Output | |
|---------|------------|------|------------|--------------|--------|
| | | | | 400W | 700W |
| ESR 160 | Ø20 | 5 | Horizontal | 100 kg | 100 kg |
| | | | Vertica | 60 kg | 60 kg |
| | | 10 | Horizontal | 80 kg | 80 kg |
| | | | Vertica | 40 kg | 45 kg |
| | | 20 | Horizontal | 35 kg | 70 kg |
| | | | Vertica | 20 kg | 30 kg |

ESR 160-S

Direct Coupled

Dimensions Table

(mm)

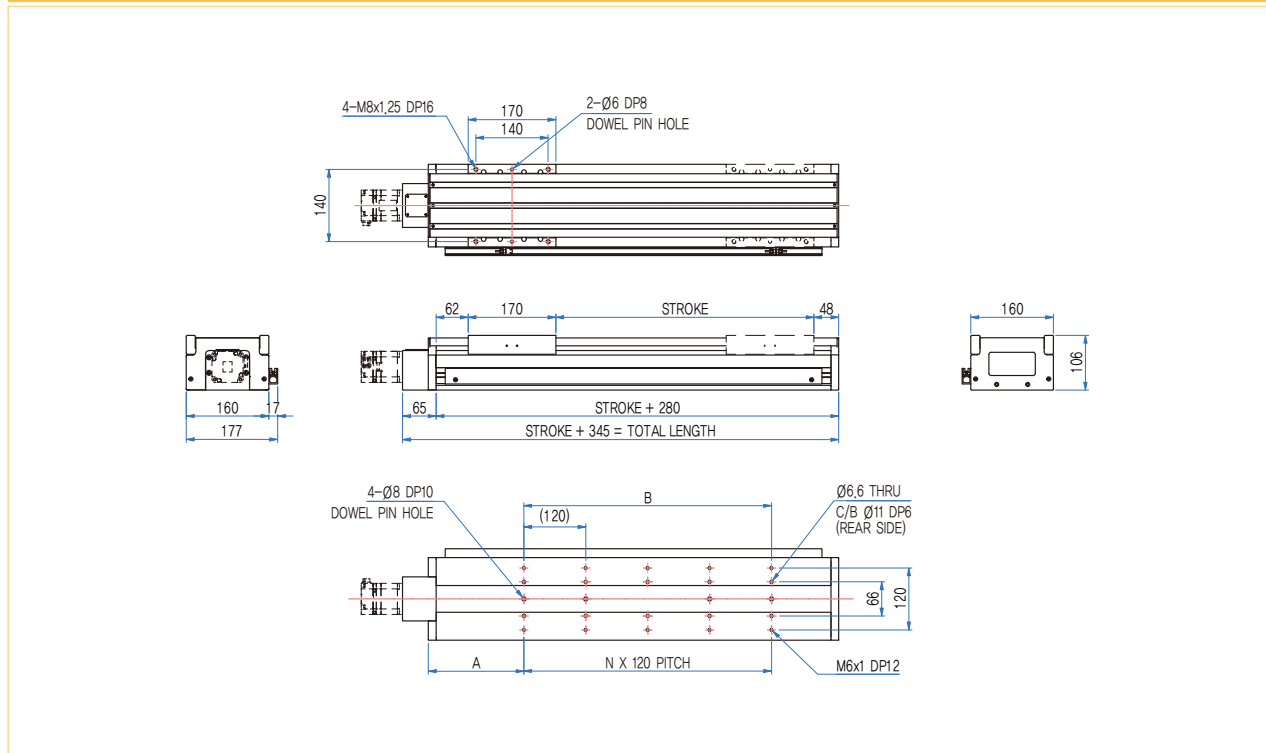
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 445 | 545 | 645 | 745 | 845 | 945 | 1045 | 1145 | 1245 | 1345 | 1445 | 1545 | 1645 | 1745 | 1845 |
| A | 70 | 70 | 100 | 100 | 80 | 80 | 80 | 70 | 100 | 100 | 100 | 100 | 100 | 80 | 70 |
| B | 240 | 360 | 360 | 480 | 600 | 720 | 840 | 960 | 960 | 1080 | 1200 | 1320 | 1440 | 1560 | 1680 |
| N (EA) | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Weight (kg) | 10,1 | 12,4 | 14,7 | 17 | 19,3 | 21,6 | 23,9 | 26,2 | 28,5 | 30,8 | 33,1 | 35,4 | 37,7 | 40 | 42,3 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

External Dimension



ESR 160-B

Parallel Bottom

■ Dimensions Table

(mm)

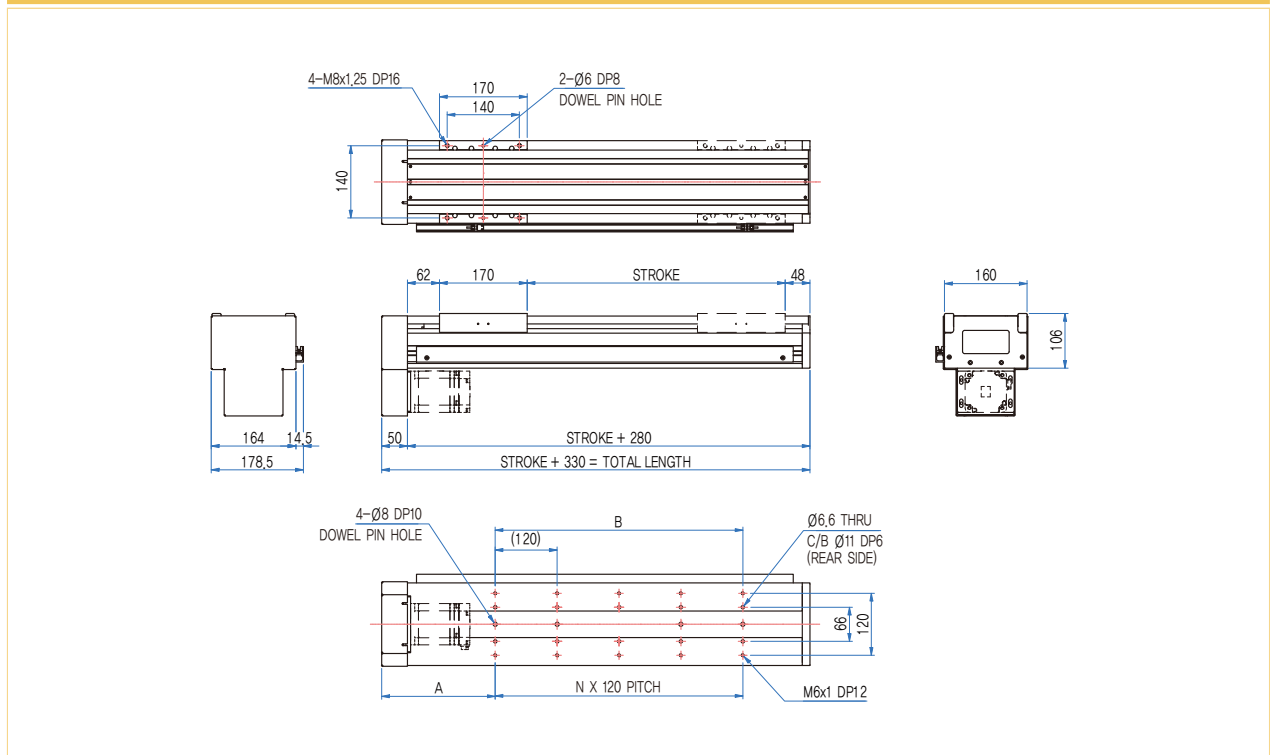
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 430 | 530 | 630 | 730 | 830 | 930 | 1030 | 1130 | 1230 | 1330 | 1430 | 1530 | 1630 | 1730 | 1830 |
| A | 220 | 220 | 220 | 240 | 220 | 220 | 220 | 220 | 220 | 240 | 240 | 220 | 220 | 220 | 220 |
| B | 120 | 240 | 360 | 360 | 480 | 600 | 720 | 840 | 960 | 960 | 1080 | 1200 | 1320 | 1440 | 1560 |
| N (EA) | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 12 | 13 |
| Weight (kg) | 12,2 | 14,5 | 16,8 | 19,1 | 21,4 | 23,7 | 26 | 28,3 | 30,6 | 32,9 | 35,2 | 37,5 | 39,8 | 42,1 | 44,4 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

■ External Dimension



ESR 160-L

Parallel Left

■ Dimensions Table

(mm)

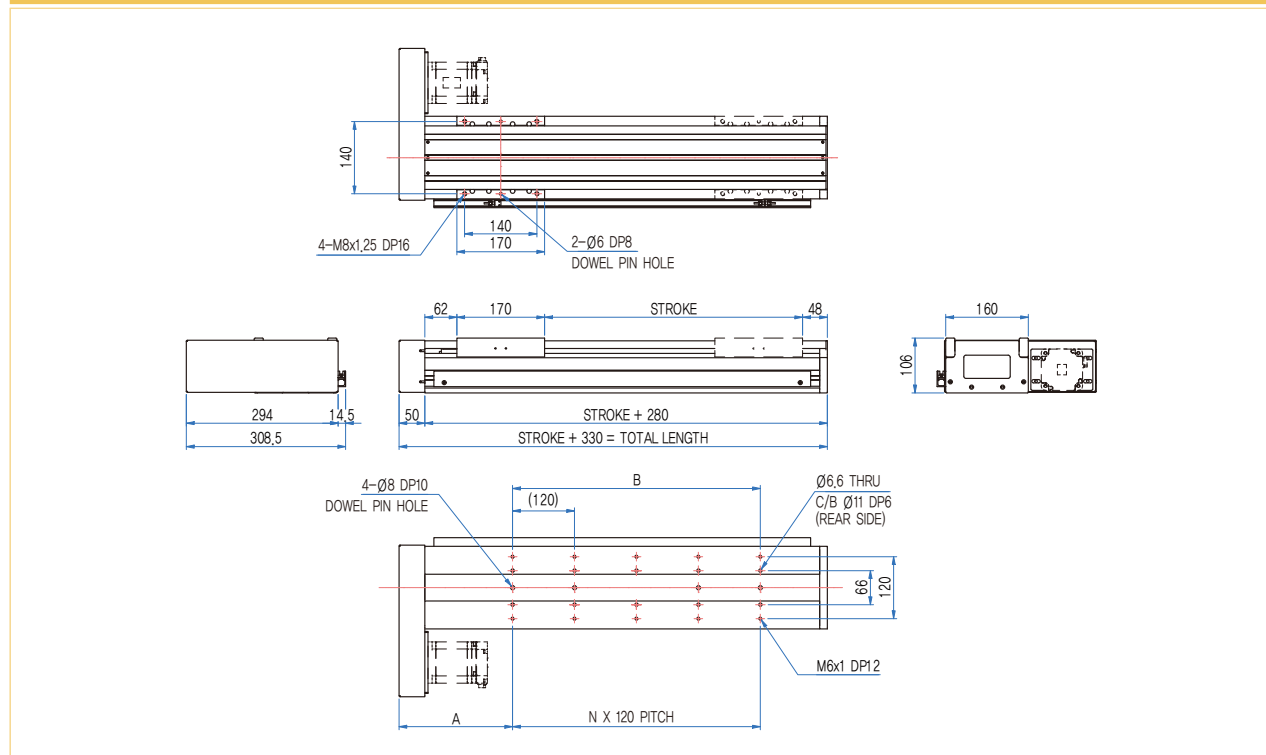
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 430 | 530 | 630 | 730 | 830 | 930 | 1030 | 1130 | 1230 | 1330 | 1430 | 1530 | 1630 | 1730 | 1830 |
| A | 120 | 100 | 100 | 140 | 140 | 140 | 120 | 120 | 100 | 140 | 120 | 120 | 120 | 100 | 100 |
| B | 240 | 360 | 480 | 480 | 600 | 720 | 840 | 960 | 1080 | 1080 | 1200 | 1320 | 1440 | 1560 | 1680 |
| N (EA) | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 |
| Weight (kg) | 12,2 | 14,5 | 16,8 | 19,1 | 21,4 | 23,7 | 26 | 28,3 | 30,6 | 32,9 | 35,2 | 37,5 | 39,8 | 42,1 | 44,4 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

■ Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

■ External Dimension



ESR 160-R

Parallel Right

Dimensions Table

(mm)

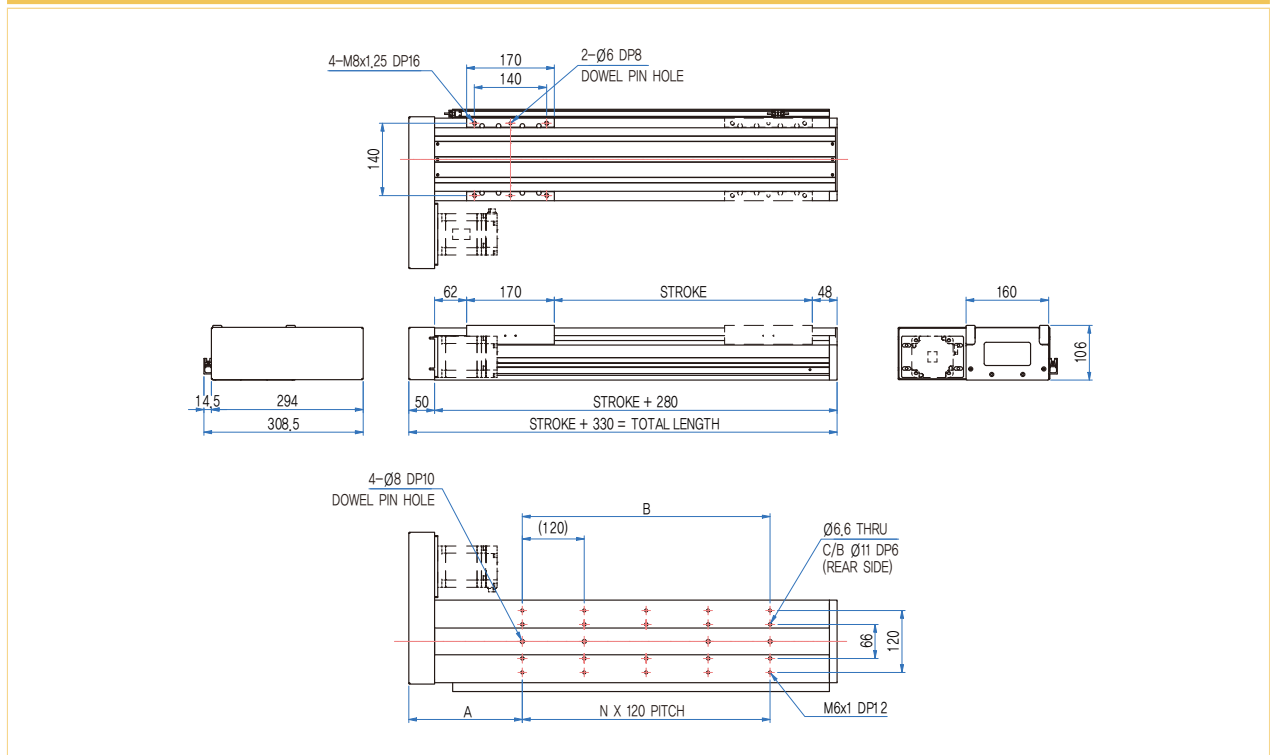
| Stroke | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Total Length | 430 | 530 | 630 | 730 | 830 | 930 | 1030 | 1130 | 1230 | 1330 | 1430 | 1530 | 1630 | 1730 | 1830 |
| A | 120 | 100 | 100 | 140 | 140 | 140 | 120 | 120 | 100 | 140 | 120 | 120 | 120 | 100 | 100 |
| B | 240 | 360 | 480 | 480 | 600 | 720 | 840 | 960 | 1080 | 1080 | 1200 | 1320 | 1440 | 1560 | 1680 |
| N (EA) | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 |
| Weight (kg) | 12,2 | 14,5 | 16,8 | 19,1 | 21,4 | 23,7 | 26 | 28,3 | 30,6 | 32,9 | 35,2 | 37,5 | 39,8 | 42,1 | 44,4 |

※ (주) 표기 외 Stroke 사용시 당사로 문의 바랍니다.

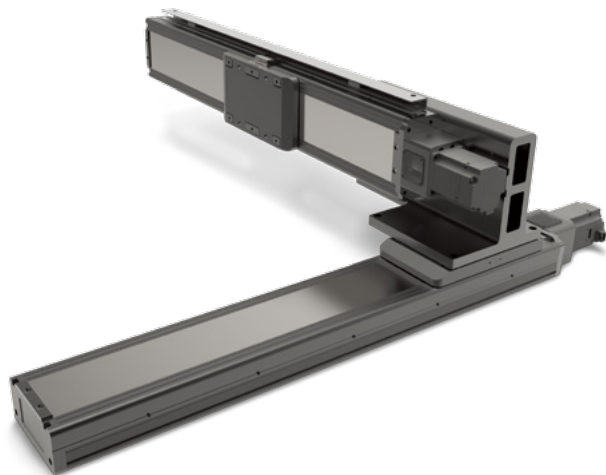
Motor Capacity

| W | Maker | Model | W | Maker | Model |
|------|-------------|-----------------|------|-------------|-----------------|
| 400W | Panasonic | MSMD04 / MSMF04 | 750W | Panasonic | MSMD08 / MSMF08 |
| | Mitsubishi | HG-KR43 | | Mitsubishi | HG-KR73 |
| | Yaskawa | SGM7J-04 | | Yaskawa | SGM7J-08 |
| | LS Mecapion | FBL04A | | LS Mecapion | FCL08A |

External Dimension



Series Combination



Combination Type

ELS Series

X2-Y-WD Type
Wall Mount Type



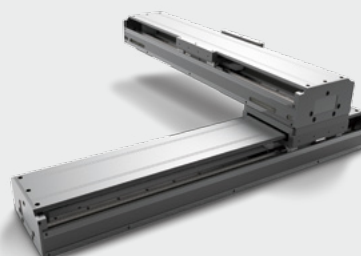
X2-Y-HD Type
Horizontal Type



X1-Y-WT Type
Wall Mount Type



X1-Y-HT Type
Horizontal Type



ELS SERIES

ECR SERIES

ESR SERIES

COMBINATION

VS SERIES

MS SERIES

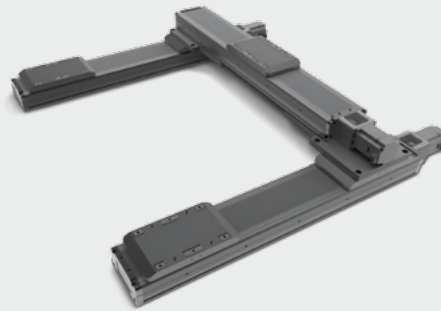
Combination Type

ECR, ESR Series

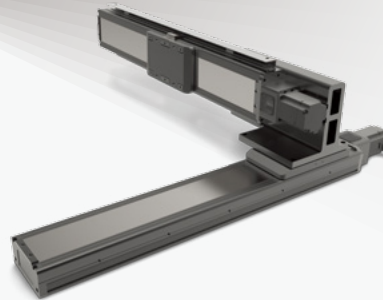
X2-Y-WD Type
Wall Mount Type



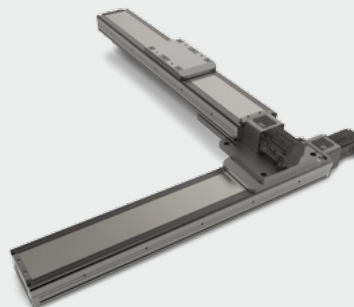
X2-Y-HD Type
Horizontal Type



X1-Y-WT Type
Wall Mount Type



X1-Y-HT Type
Horizontal Type



Combination Type Module Bracket

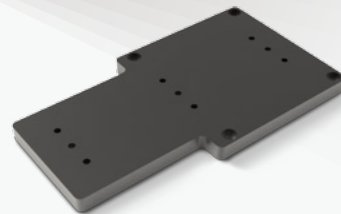
WD
[A-Type]



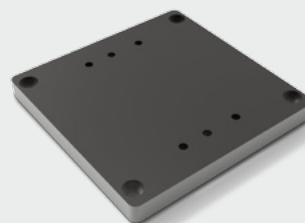
WD
[B-Type]



HT
[A-Type]



HT
[B-Type]



ELS SERIES

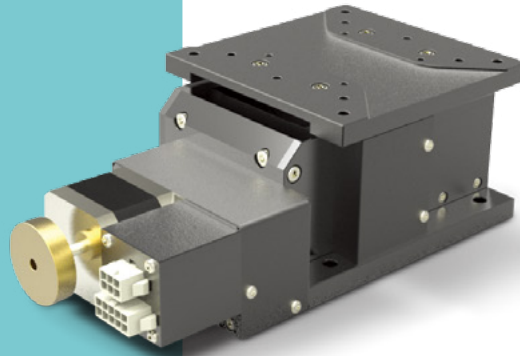
ECR SERIES

ESR SERIES

COMBINATION

VS SERIES

MS SERIES



VERTICAL Z-AXIS

VS Series

VS - 120 T - B

1

2

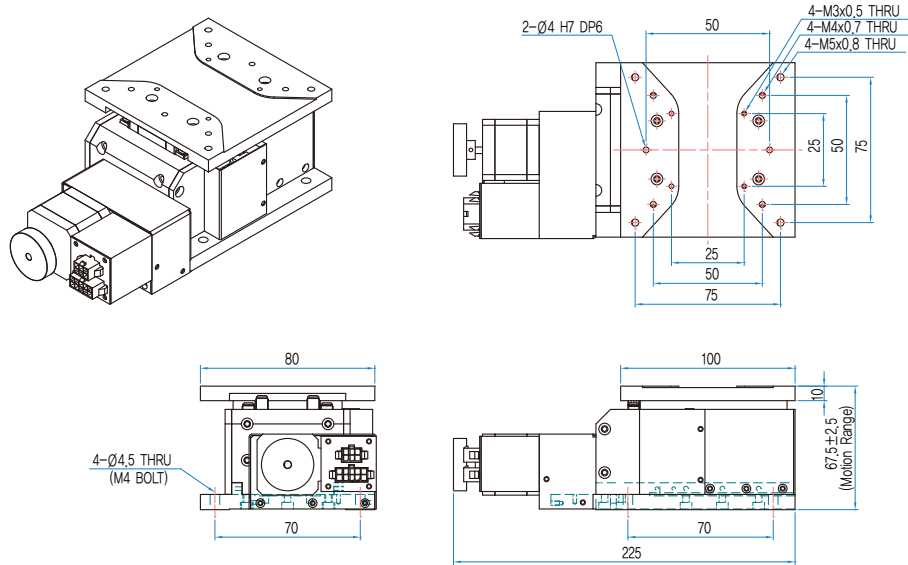
3

| | | | |
|---|-----------------|---------------------------------------|----------------|
| 1 | Table Size (mm) | 100 x 80 120 x 120 | : 080 : 120 |
| 2 | Motor Type | Stepping Motor : T Servo Motor : S | |
| 3 | Body Color | Black White | : B : W |

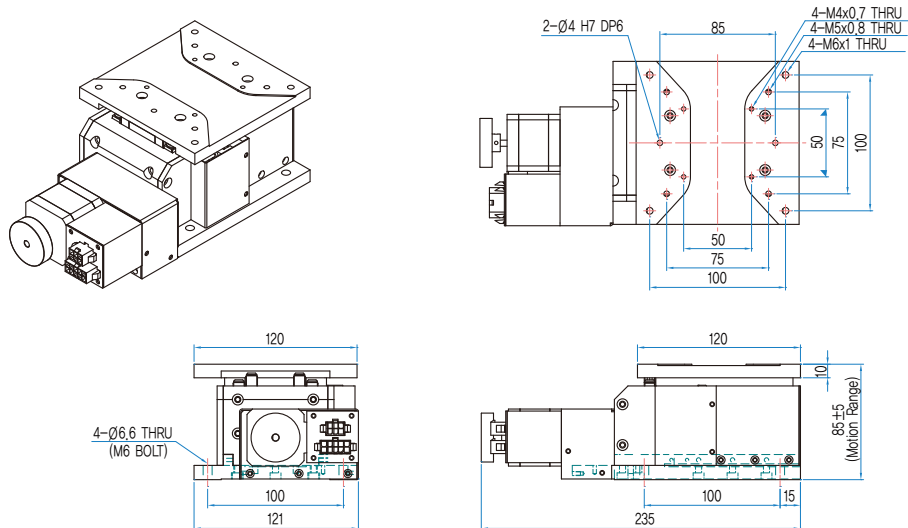
Specifications

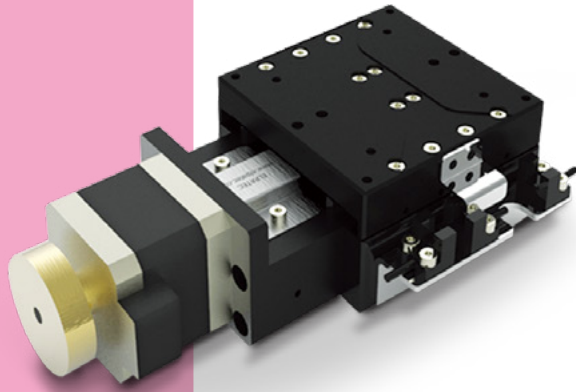
| Model | VS 080 | VS 120 |
|-------------------|-----------------------------|----------------------|
| Table Size | 100 x 80 mm | 120 x 120 mm |
| Motion Range | ± 2,5 mm | ± 5 mm |
| Load Capacity | 12 kg | 20 kg |
| Maximum Speed | Ball Screw Ø6 Lead 1 | Ball Screw Ø8 Lead 1 |
| Ballscrew Lead | 5 mm/sec | |
| Accuracy | 0,005 mm | |
| Uni-Repeatability | ± 0,001 mm | |
| Bi-Repeatability | ± 0,002 mm | |
| Parallelism | 0,010 mm | |
| Motor | Stepping Motor, Servo Motor | |
| Body Color | Black, White | |
| Material | Aluminum, S45C | |
| Guide Mechanism | Cross-Roller Guide | |
| Weight | 2,5 kg | 4 kg |

■ External Dimension - VS 080



■ External Dimension - VS 120





MINIATURE X-Y STAGE

MS Series

MS - 120 T - B

1

2

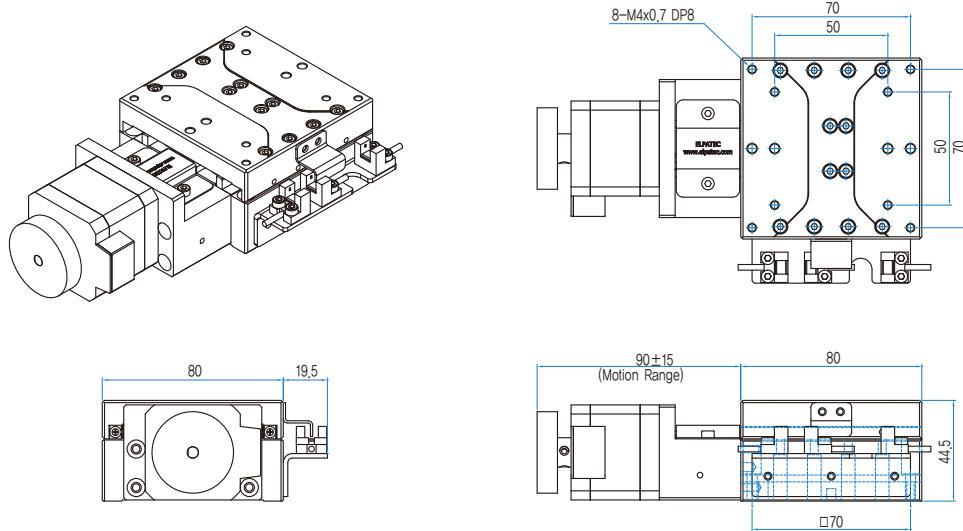
3

| | | | |
|---|-----------------|---------------------------------------|----------------|
| 1 | Table Size (mm) | 100 x 80 120 x 120 | : 080 : 120 |
| 2 | Motor Type | Stepping Motor : T Servo Motor : S | |
| 3 | Body Color | Black White | : B : W |

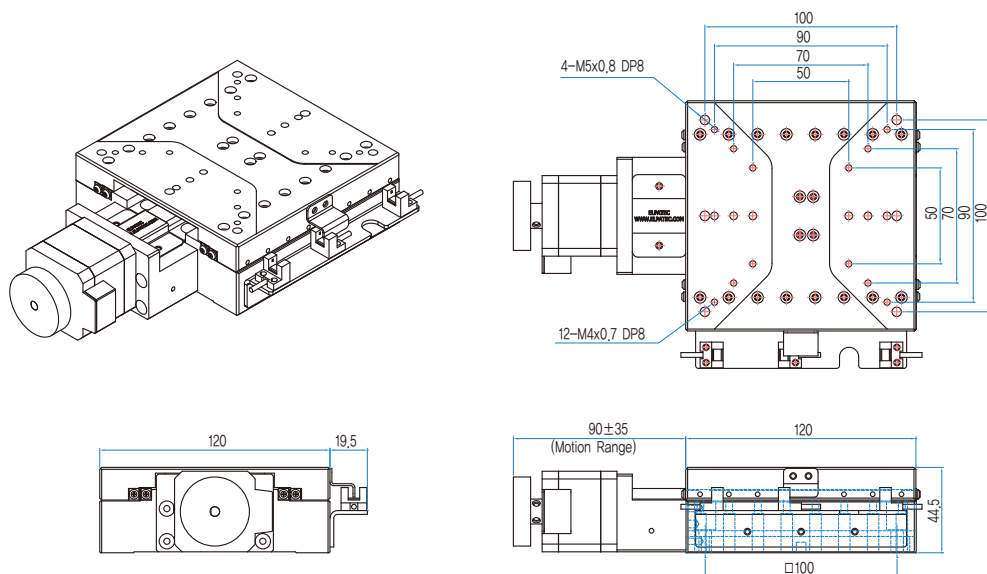
Specifications

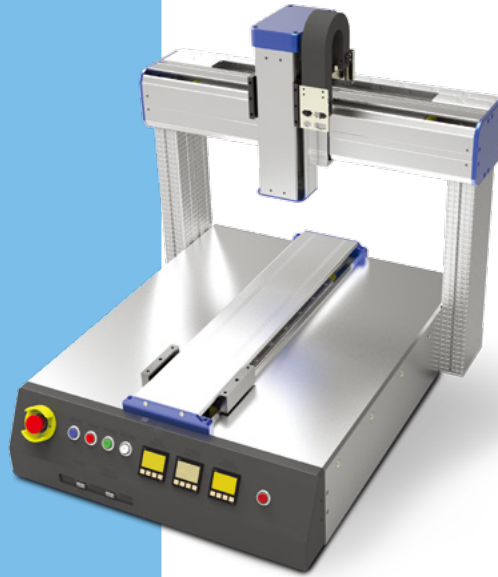
| Model | MS 080 | MS 120 |
|-------------------|-----------------------------|--------------|
| Table Size | 80 x 80 mm | 120 x 120 mm |
| Motion Range | ± 15 mm | ± 35 mm |
| Load Capacity | 14 kg | 17 kg |
| Maximum Speed | Ball Screw Ø8 Lead 1 | |
| Ball Screw Lead | 20 mm/sec | |
| Accuracy | 0,005 mm | |
| Uni-Repeatability | ± 0,001 mm | |
| Bi-Repeatability | ± 0,002 mm | |
| Parallelism | 0,010 mm | |
| Motor | Stepping Motor, Servo Motor | |
| Body Color | Black, White | |
| Material | Aluminum, S45C | |
| Guide Mechanism | Cross-Roller Guide | |
| Weight | 2,5 kg | 4 kg |

■ External Dimension - MS 080



■ External Dimension - MS 120





DESKTOP STAGE

ETS Series

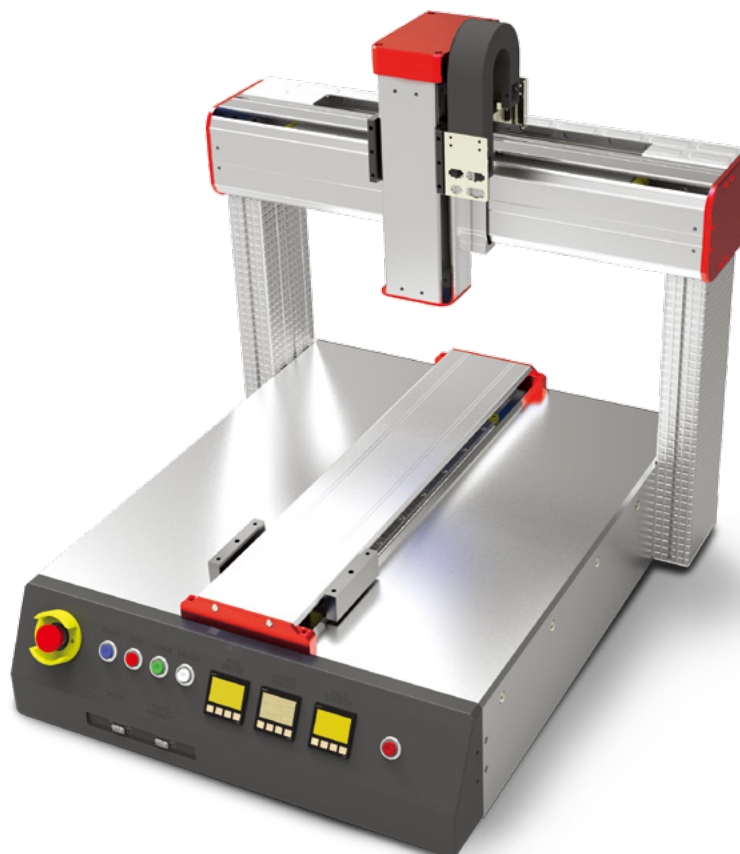
ETS - 40 40 10 S W (0)

1 2 3 4 5 6

| | |
|---|--|
| <p>1 X Axis Stroke Length (mm)</p> <p>200 : 20 300 : 30 400 : 40</p> | <p>4 Driving Screw</p> <p>S : AC Servo Motor + Ball Screw B : Step Motor + Belt</p> |
| <p>2 Y Axis Stroke Length (mm)</p> <p>200 : 20 300 : 30 400 : 40</p> | <p>5 Color</p> <p>B : Black W : White</p> |
| <p>3 Z Axis Stroke Length (mm)</p> <p>50 : 05 100 : 10</p> | <p>6 Options</p> |

■ Specifications

| Model | | ETS-202005 | ETS-303010 | | ETS-404010 | |
|--------------------|--------------------|-------------------|-----------------------|---------------------------|-----------------------|---------------------------|
| | | B | S | B | S | B |
| Range | X, Y Axes (mm) | 200 | 300 | | 400 | |
| | Z Axis (mm) | 50 | 100 | | 100 | |
| Payload (Maximum) | Y Axis (kg) [Work] | 5 | 20 | 15 | 20 | 15 |
| | Z Axis (kg) [Tool] | 2 | 7 | 7 | 7 | 7 |
| Velocity (Maximum) | X, Y Axes (mm/sec) | 500 | 1000 | 500 | 1000 | 500 |
| | Z Axis (mm/sec) | 100 | 250 | 100 | 250 | 100 |
| Repeatability | X, Y Axes (mm) | ± 0.01 | ± 0.005 | ± 0.01 | ± 0.005 | ± 0.01 |
| | Z Axis (mm) | ± 0.01 | ± 0.005 | ± 0.005 / ± 0.01 | ± 0.005 | ± 0.005 / ± 0.01 |
| Drive | X, Y Axes | Step Motor & Belt | AC Servo & Ball Screw | Step Motor & Belt | AC Servo & Ball Screw | Step Motor & Belt |
| | Z Axis | | | Servo / Step & Ball Screw | | Servo / Step & Ball Screw |
| Dimension | W X D X H (mm) | 320 X 320 X 400 | 520 X 530 X 550 | 470 X 480 X 520 | 700 X 750 X 768 | 700 X 742 X 718 |



ETS SERIES

EPCS SERIES

DWR SERIES

ESA SERIES

UVW SERIES

PRECISION



**CROSS-ROLLER GUIDE
X-Y STAGE**

**EPCS
Series**

EPCS - 250

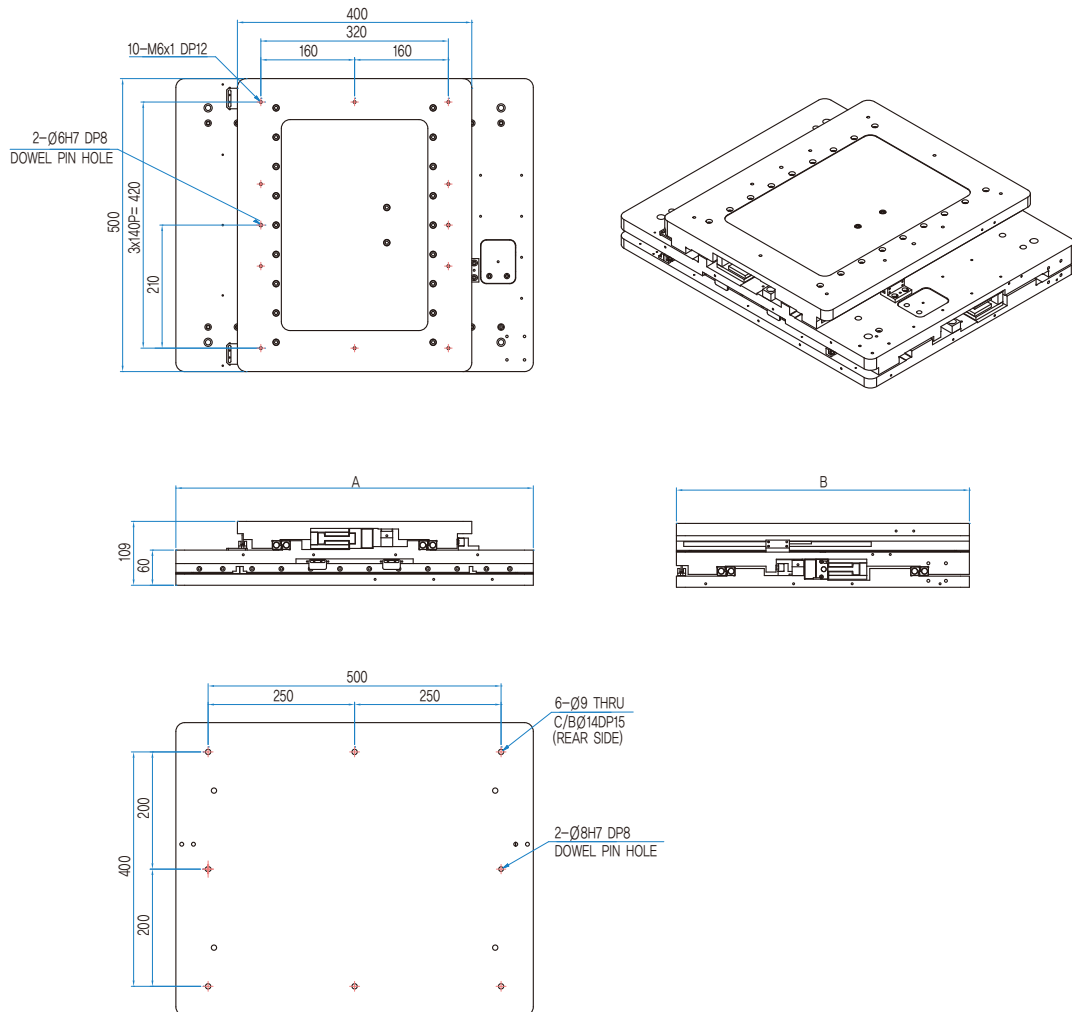
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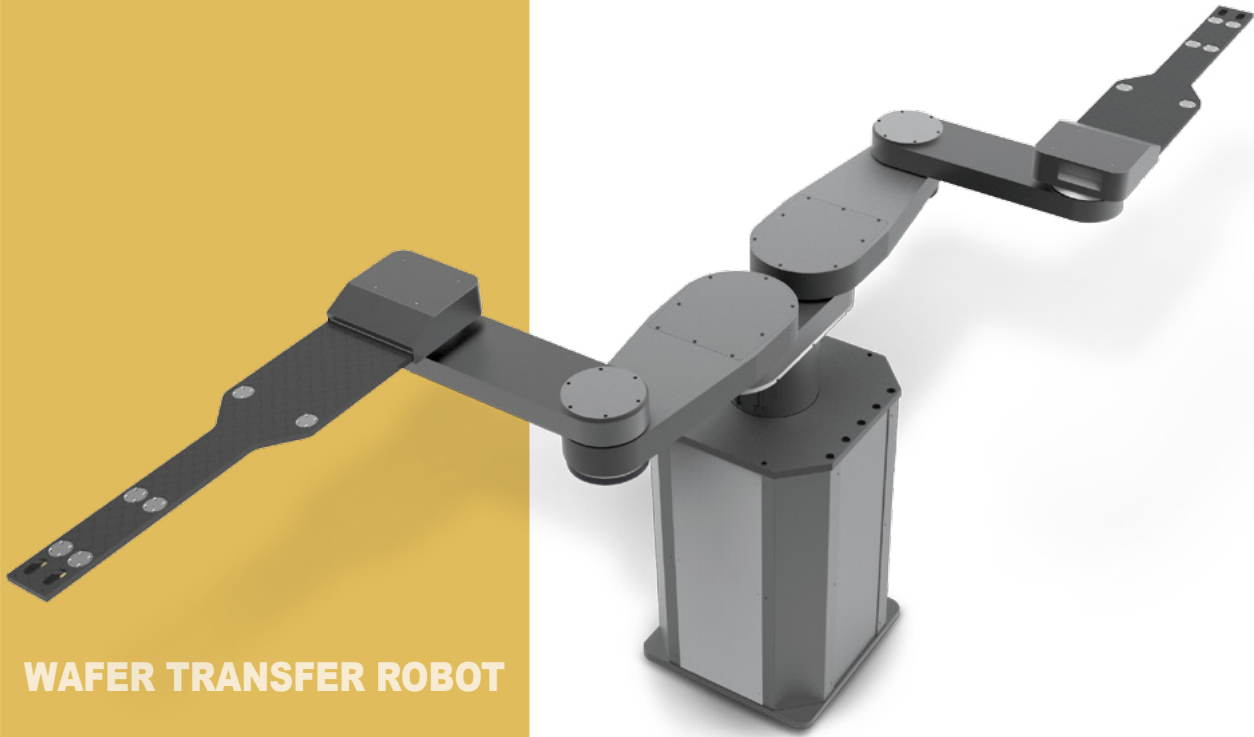
| | | | |
|---|-----------------|-----|-------|
| 1 | X-Y Stroke (mm) | 250 | : 250 |
| | | 300 | : 300 |

■ Specifications

| Model | | EPCS 250 | EPCS 300 |
|-------------------|-------|-----------------------|--------------|
| Axis | | X-Y | X-Y |
| Travel Range | | 250 x 250 mm | 300 x 300 mm |
| Load Capacity | | 10 kg | 15 kg |
| Moving Table Mass | Upper | 10 kg | |
| | Lower | 16 kg | |
| Guide System | | Cross-Roller Guide | |
| Motor System | | Coreless Linear Motor | |
| Velocity | | 500 mm/sec | |
| Acceleration | | 0.5 G | |
| Accuracy | | 10 μ m | |
| Repeatability | | 1 μ m | |
| Straightness | | \pm 5 μ m | |
| Flatness | | \pm 5 μ m | |
| Orthogonality | | 10 arc-sec | |
| Pitch | | 10 arc-sec | |
| Yaw | | 10 arc-sec | |
| Weight | | 85 kg | 95 kg |

External Dimension





WAFER TRANSFER ROBOT

DWR Series

DWR - S - 0300

1

2

1

Arm Type

Single : S

Double : D

2

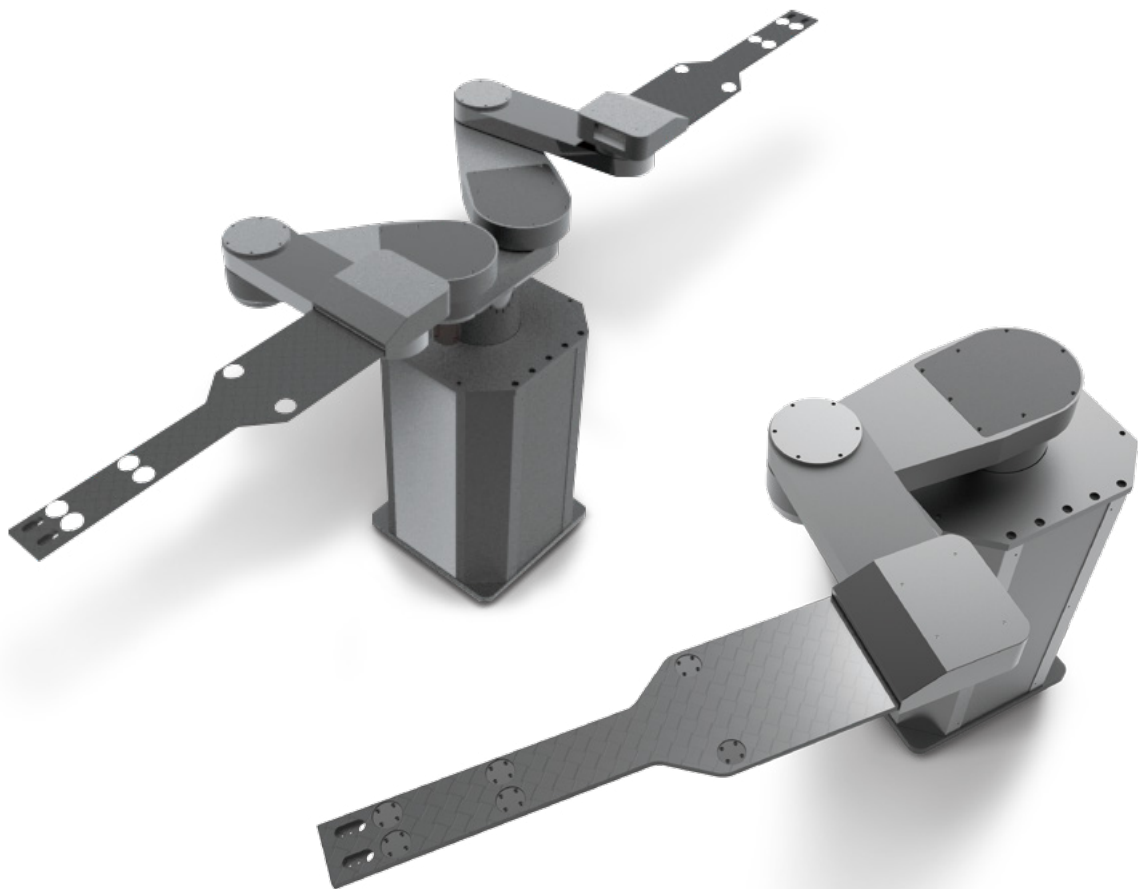
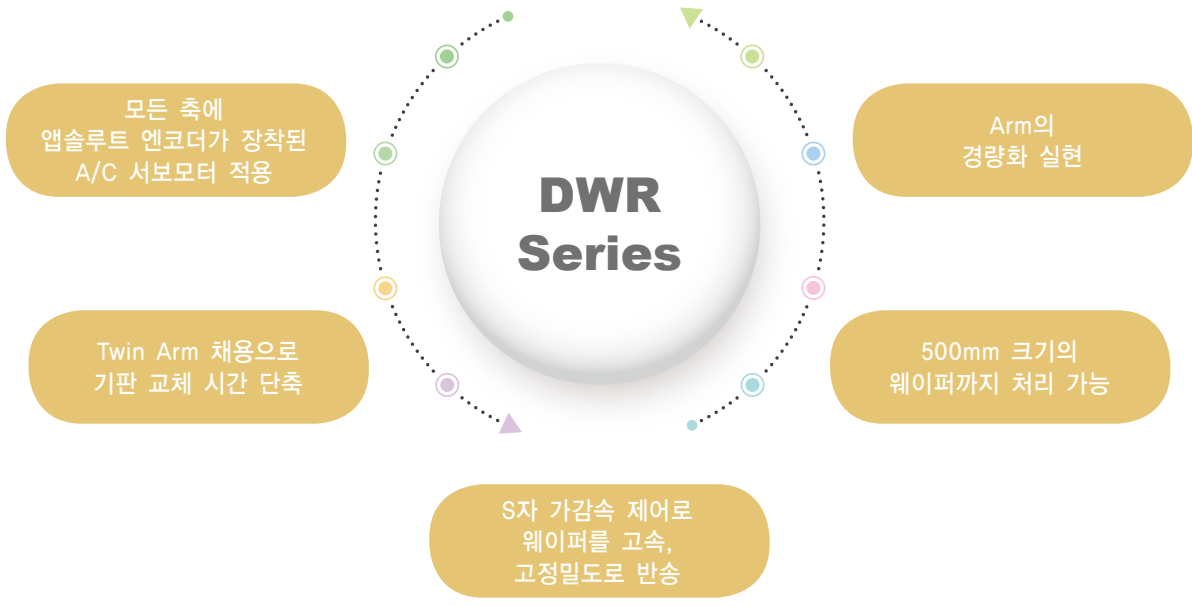
Wafer Size (mm)

300 : 0300

400 : 0400

500 : 0500

■ DWR Series

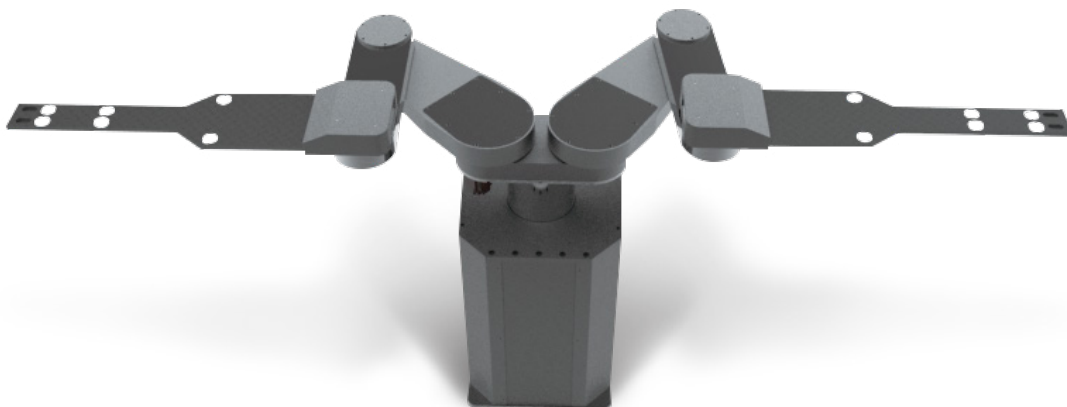


DWR Series

0300

■ Specifications

| Robot Series | | DWR 0300 |
|-----------------|--------|-----------|
| Object Spec | | 300 mm |
| Controlled Axis | | 3 Axis |
| Arm Type | | Double |
| Motion Range | R-Axis | 587 mm |
| | T-Axis | 330 deg |
| | Z-Axis | 300 mm |
| Max Speed | R-Axis | 800 mm/s |
| | T-Axis | 360 deg/s |
| | Z-Axis | 500 mm/s |
| Motor Spec | R-Axis | 100 W |
| | T-Axis | 200 W |
| | Z-Axis | 400 W |
| Repeatability | | ±0.1 mm |



DWR Series

0400, 0500

■ Specifications

| Robot Series | | DWR 0400 | DWR 0500 |
|-----------------|--------|-----------|----------|
| Object Spec | | 400 mm | 500 mm |
| Controlled Axis | | 3 Axis | |
| Arm Type | | Double | |
| Motion Range | R-Axis | 587 mm | |
| | T-Axis | 330 deg | |
| | Z-Axis | 300 mm | |
| Max Speed | R-Axis | 800 mm/s | |
| | T-Axis | 360 deg/s | |
| | Z-Axis | 500 mm/s | |
| Motor Spec | R-Axis | 100 W | |
| | T-Axis | 200 W | |
| | Z-Axis | 400 W | |
| Repeatability | | ±0,1 mm | |



SCARA ROBOT

ESA Series



ESA - 0300 - 100

1

2

| | | | |
|---|---------------|-----|--------|
| 1 | Arm Size (mm) | 300 | : 0300 |
| | | 600 | : 0600 |

| | | | |
|---|--------------------|-----|-------|
| 2 | Z-Axis Stroke (mm) | 100 | : 100 |
| | | 200 | : 200 |
| | | 300 | : 300 |

■ **ESA Series**



ETS SERIES

EPCS SERIES

DWR SERIES

ESA SERIES

UVW SERIES

PRECISION

ESA Series

0300

■ Specifications

| Robot Series | | ESA 0300 |
|--------------|-------------|-----------------|
| Arm Size | | 300 mm |
| Motion Range | J1-Axis | $\pm 155^\circ$ |
| | J2-Axis | $\pm 145^\circ$ |
| | T-Axis | $\pm 360^\circ$ |
| | Z-Axis | 100 ~ 300 mm |
| Max Speed | J1, J2-Axis | 3560 mm/s |
| | T-Axis | 1600 °/s |
| | Z-Axis | 2000 mm/s |
| Motor Spec | J1-Axis | 400 W |
| | J2-Axis | 200 W |
| | T-Axis | 100 W |
| | Z-Axis | 200 W |



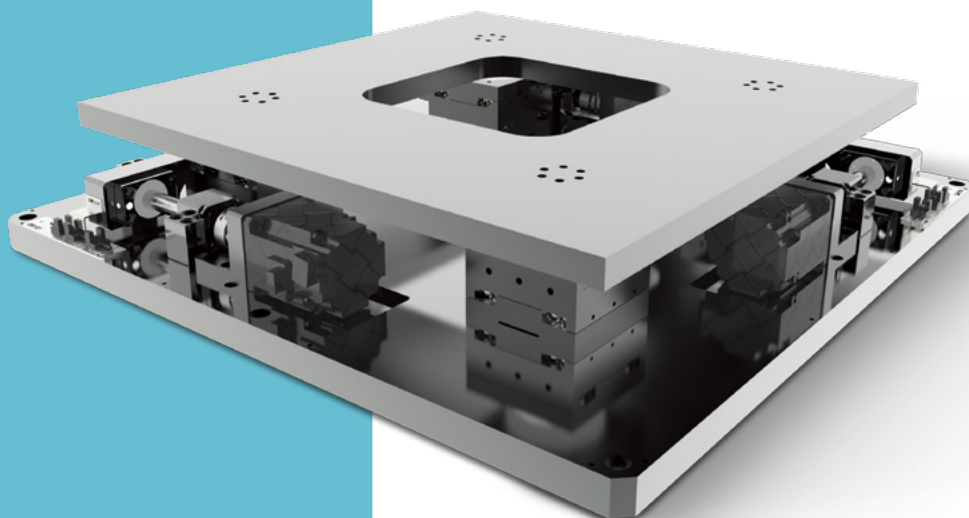
ESA Series

0400, 0600

Specifications

| Robot Series | | ESA 0600 |
|--------------|-------------|-----------------|
| Arm Size | | 600 mm |
| Motion Range | J1-Axis | $\pm 155^\circ$ |
| | J2-Axis | $\pm 145^\circ$ |
| | T-Axis | $\pm 360^\circ$ |
| | Z-Axis | 100 ~ 300 mm |
| Max Speed | J1, J2-Axis | 3560 mm/s |
| | T-Axis | 1600 °/s |
| | Z-Axis | 2000 mm/s |
| Motor Spec | J1-Axis | 400 W |
| | J2-Axis | 200 W |
| | T-Axis | 100 W |
| | Z-Axis | 200 W |





ALIGNMENT STAGE

UVW Series

UVW - 020

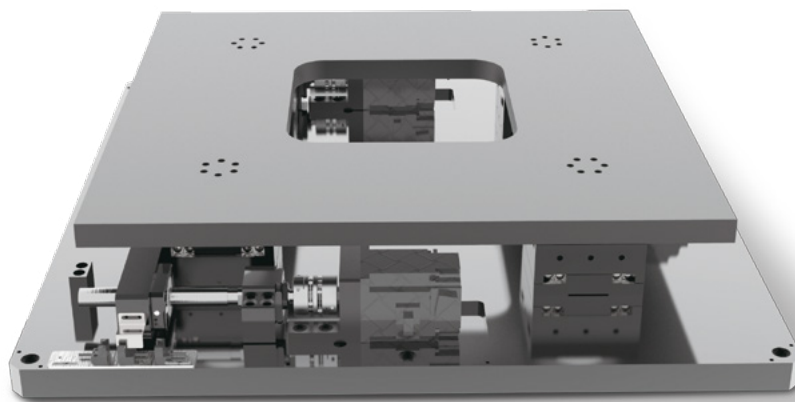
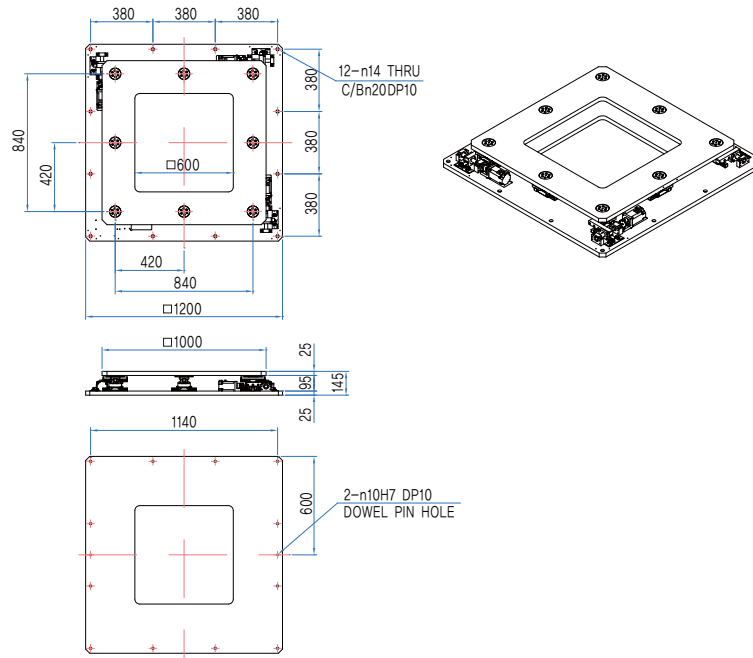
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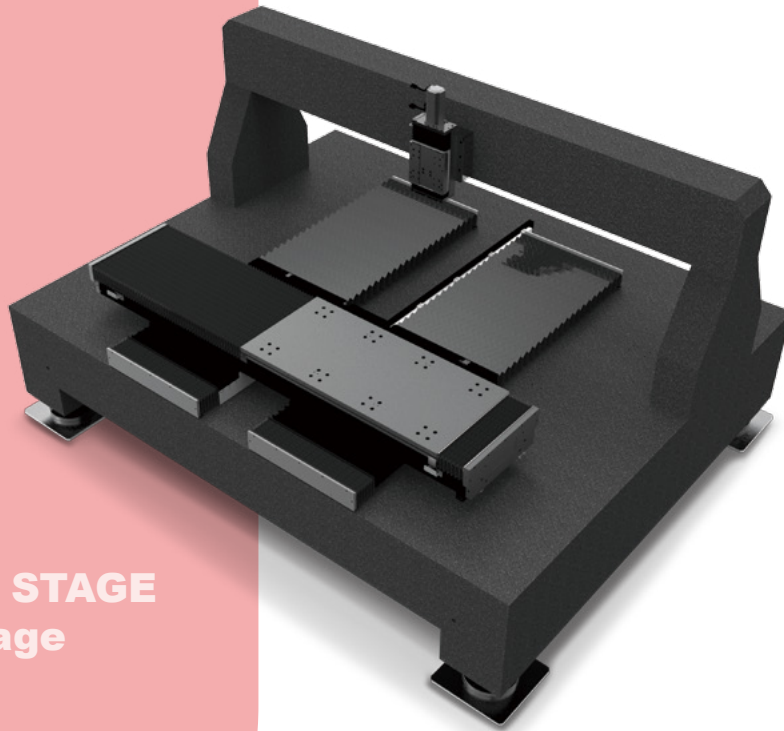
| | | | |
|---|-----------------|-------------|-------|
| 1 | Table Size (mm) | 200 x 200 | : 020 |
| | | 350 x 350 | : 035 |
| | | 500 x 500 | : 050 |
| | | 1000 x 1000 | : 100 |

Specifications

| Robot Series | UVW 020 | UVW 035 | UVW 050 | UVW 100 |
|---------------------|---|---|---|---|
| Table Size | 200 X 200 mm | 350 X 350 mm | 500 X 500 mm | 1000 X 1000 mm |
| Base Size | 350 X 350 mm | 450 X 450 mm | 600 X 600 mm | 1200 X 1200 mm |
| Stroke | $\pm 5 \text{ X } \pm 5 \text{ X } \pm 3^\circ$ | $\pm 5 \text{ X } \pm 5 \text{ X } \pm 3^\circ$ | $\pm 15 \text{ X } \pm 15 \text{ X } \pm 3^\circ$ | $\pm 15 \text{ X } \pm 15 \text{ X } \pm 3^\circ$ |
| Repetition Accuracy | ± 3 | ± 3 | ± 3 | ± 3 |
| Payload | 60 kg | 60 kg | 100 kg | 300 kg |
| Motor | 50 W | 100 W | 200 W | 400 W |

External Dimension - UVW 100



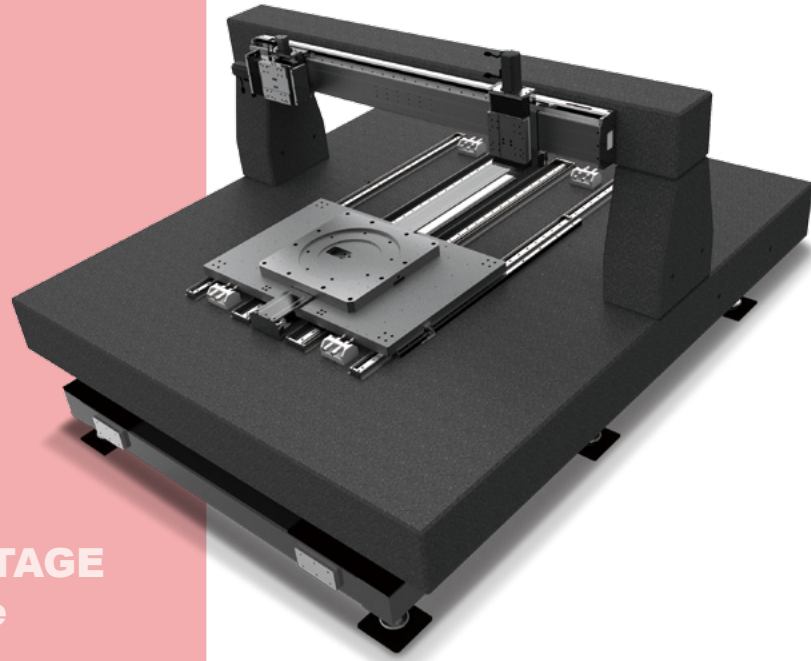


PRECISION STAGE
- Gantry Stage

EGS
Series

■ Specifications

| Model | | EGS 18T15 | EGS 19T22 | EGS 20T23 |
|---------------|--------------|-----------------------|----------------------|----------------------|
| Axis | | X-Y-Z | X-Y-Z | X-Y-Z |
| Stroke | X-Y (Gantry) | Gen 6세대 [LCD & OLED] | Gen 7세대 [LCD & OLED] | Gen 8세대 [LCD & OLED] |
| Load Capacity | X-Y (Gantry) | 50 kg | 65 kg | 75 kg |
| Guide System | | LM Guide | | |
| Motor System | | Linear Motor | | |
| Velocity | | Max, 1500 mm/sec | | |
| Accuracy | | ± 5 μm | | |
| Acceleration | | 1 G | | |
| Repeatability | | ± 3 μm | | |
| Straightness | | ± 10 μm (Full Stroke) | | |
| Flatness | | ± 10 μm (Full Stroke) | | |
| Pitch | | ± 15 arc-sec | | |
| Yaw | | ± 5 arc-sec | | |
| Material | | Aluminum | | |



PRECISION STAGE
- Hybrid Stage

EHS Series

ETS SERIES

EPCS SERIES

DWR SERIES

ESA SERIES

UVM SERIES

PRECISION

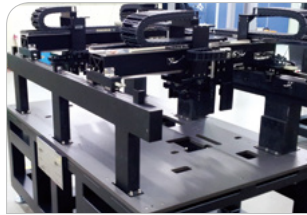
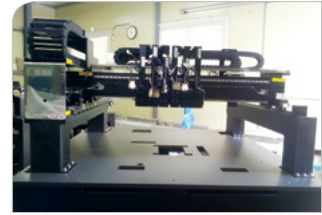
■ Specifications

| Model | | EHS 18T15 | EHS 19T22 | EHS 20T23 |
|---------------|--------------|-----------------------|----------------------|----------------------|
| Axis | | X-Y-Z | X-Y-Z | X-Y-Z |
| Stroke | X-Y (Gantry) | Gen 6세대 [LCD & OLED] | Gen 7세대 [LCD & OLED] | Gen 8세대 [LCD & OLED] |
| Load Capacity | X-Y (Gantry) | 40 kg | 50 kg | 65 kg |
| Guide System | | LM Guide | | |
| Motor System | | Linear Motor | | |
| Velocity | | Max. 1500 mm/sec | | |
| Accuracy | | ±10 μm | | |
| Acceleration | | 0.8 G | | |
| Repeatability | | ± 3 μm | | |
| Straightness | | ± 15 μm (Full Stroke) | | |
| Flatness | | ± 15 μm (Full Stroke) | | |
| Pitch | | ± 15 arc-sec | | |
| Yaw | | ± 5 arc-sec | | |
| Material | | Aluminum | | |

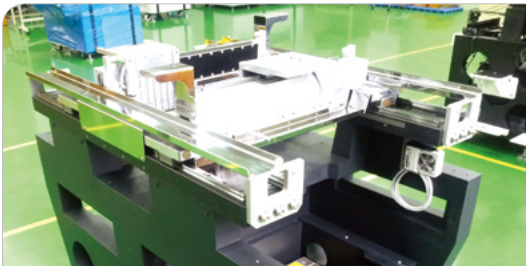
PRODUCT

적용사례

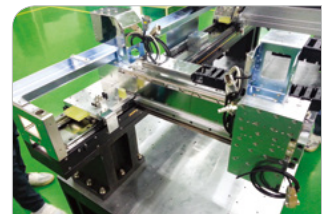
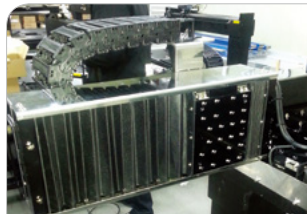
■ Semi-Gantry Stage



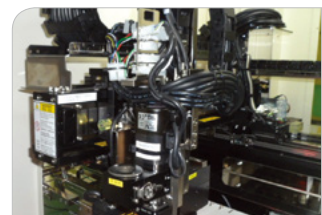
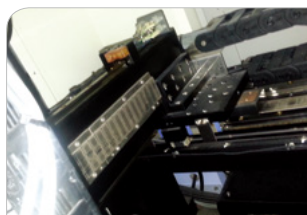
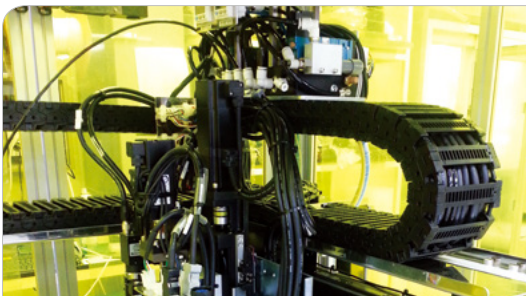
■ Dual-Gantry Stage



■ Cantilever Stage

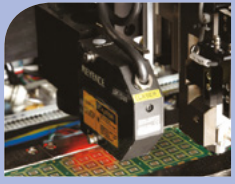


■ XYZ Stage



■ 적용사례

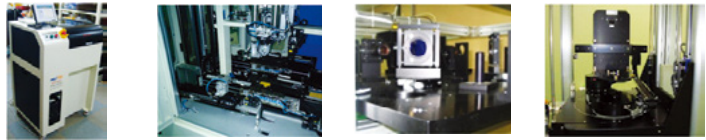
Dispensing System



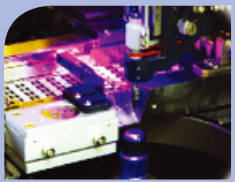
Attach System



Wafer Handling System



Die Bonding System



FA System



Transfer Robot System





안전상의 주의사항

제품의 사용전에는 '안전상의 주의'를 모두 숙독하신 후 바르게 사용해 주십시오.

아래의 주의사항은 제품을 안전하고 바르게 사용하여 고객의 '위험'과 '고장'을 미연에 방지하기 위함입니다. 기기의 선정 및 취급에 있어서는 충분한 지식과 경험을 가진 자가 반드시 취급설명서를 완전히 숙독한 후 사용해 주십시오.

■ 아래의 용도에 사용하지 마십시오.

1. 인명 및 신체의 유지, 관리 등에 관계된 의료기구
2. 사람의 이동, 반송을 위한 기구
3. 기타 인명에 영향을 주는 장치

※ 반드시 제품의 사양범위 내에서 사용하십시오.

※ 제품에 관한 문의에 있어서는 당사에 문의 바랍니다.

■ 설치

1. 발화물, 인화물, 폭발물 등의 위험물이 있는 장소에서는 사용하지 마십시오.
2. 제품을 설치할 때에는 반드시 확실한 유지 및 고정하여 주십시오.
3. 제품을 습기, 기름기 등이 있는 장소에서는 사용하지 마십시오.
4. 비상 정지, 정전 등 시스템의 이상시에 기계가 정지할 경우 장치의 파손, 인체사고 등이 발생하지 않도록 장치를 설계해 주십시오.
5. 제품의 전기를 공급하기 전 및 운전 전에는 반드시 기기의 작동 범위의 안전 확인을 해주십시오.
6. 제품을 장착 할 때에는 보수 작업이 가능하도록 공간을 확보해 주십시오.
7. 제품 설치전 아래의 조건을 만족하는 환경을 만들어 주십시오.

| | |
|------------------------|-------------------------------|
| - 직사광선이 비치지 않는 곳 | - 큰 열원에서 복사열이 기계 본체에 미치지 않을 것 |
| - 주변 온도는 0℃ ~ 40℃ | - 습도는 85% 이하, 결로가 없을 것 |
| - 부식성 가스, 가연성 가스가 없을 것 | - 먼지, 쓰레기, 금속가루 등이 많지 않을 것 |
| - 오일미스트, 절삭액이 묻지 않을 것 | - 심한 전자파, 자외선, 방사선이 없을 것 |

■ 운전

1. 제품을 취급할 때에는 필요에 따라 보호장갑, 보호안경, 안전화 등을 착용하여 안전을 확보하십시오.
2. 제품의 운전중 또는 작동가능한 상태에서는 기계 작동범위에 접근하지 마십시오.
3. 정전시에는 우선 전원을 차단해 주십시오. 정전 복구시 장치가 갑자기 움직여서 부상, 제품 파손의 원인이 됩니다.
4. 케이블에 흠집을 내거나 무리하게 굽힘, 당김, 감김 등이나 무거운 것을 올릴 때에는 누전과 전류 불량으로 화재와 감전, 이상 작동 등의 원인이 됩니다.
5. 제품 위로 올라가거나, 물건을 올리거나 제품의 입구부에 손가락이나 물건을 넣지 마십시오.
6. 제품의 운전을 기계적인 장애물을 사용해서 강제 정지를 하여서는 절대 안되며, 내부에 이물질이 혼입되면 제품 파손의 원인이 되므로 절대적으로 주의하십시오.
7. 제품에서 소음, 냄새, 발열, 발연이 있을 때에는 즉시 전원을 꺼주십시오.
8. 제품은 당사에서 허용한 부하 및 속도 이상으로 운전을 하여서는 안되며, 과부하와 높은 속도는 제품의 파손 및 수명 단축의 직접적인 원인이 됩니다.

■ 운반 및 이동 방법

1. 본 제품은 고속으로 운전하는 정밀한 제품이므로 운반하는 과정에 충격이 가해지지 않도록 절대 주의 바랍니다.
2. 운반 시 충격이 있을 경우 제품에 손상이 발생할 수 있으며, 특히 Servo Motor가 부착되어 있을 경우 외부에 충격이 있을 경우에는 Servo Motor Encoder 및 Encoder Cover의 파손이 있을 수 있으므로 특히 주의 바랍니다.
3. 본 제품은 외부가 알루미늄으로 되어 있으므로 거친 표면과 마찰이 있거나, 날카로운 물체와 부딪힐 경우 표면에 손상을 입을 수 있으므로 취급에 주의 바랍니다.
4. 무거운 제품은 운반 시 단독으로 작업하여 낙하하는 일이 없도록 주의 바랍니다.
5. 운반 및 이동 시 Robot의 End Cover나 Cable을 절대 잡지 마십시오. 운반 시에는 항상 수평을 유지하여 주십시오.
6. 장거리 이동 시에는 수평을 유지한 상태에서 Robot의 몸체와 Slider가 움직이지 않도록 고정 한 후 이동하여 주십시오.

■ 보관 유의 사항

1. Robot의 보관 및 사용 환경은 다음의 조건을 만족하는 환경이 되어야 합니다.
 - 실내의 직사광선이 닿지 않는 곳
 - 주위의 대형 열원으로부터 로봇 전체에 복사열이 직접 닿지 않는 곳
 - 주위 온도는 0℃ ~ 40℃
 - 습도는 85% 이하 이어야 하며, 이슬이 맺히지 않는 곳
 - 부식성 GAS 및 가연성 GAS가 없는 곳
 - 주위에 다량의 분진이 발생하지 않는 곳
 - 0.3G를 초과하는 진동이 전달되지 않는 곳
 - 심한 자력, 전자파, 자외선, 방사선이 없는 곳
2. Robot의 보관하는 과정에 제품 위로 올라가거나 무거운 물건을 적재하면 파손의 위험이 있으니 충격이 가해지지 않도록 주의하여 주시기 바랍니다.
3. Robot을 보관할 경우에는 BOX 포장을 하여 2단 이하로 포장 BOX의 상하 면이 바뀌지 않도록 수평 바닥에 적재하여 주시기 바랍니다.
4. 당사의 Robot은 이동 또는 적재에 대한 환경적인 문제에 관한 별도의 시험이 이루어져 있지 않습니다. 만약 정밀 기기로써의 세심한 주의가 없으면 사용 수명에 막대한 영향을 줄지도 모르는 문제점이 발생할 수 있습니다.
5. 본 제품은 외부의 분진 및 충격으로부터 Robot을 보호할 수 있도록 세척된 종이 BOX, 발포제 및 비닐로 포장 되어 있습니다.
6. LM Guide 및 Ball Screw에는 그리스가 도포되어 있으나 장기간 보관 시 부식 및 녹 등이 발생 할 수 있습니다.

■ 보수, 점검, 수리

1. 제품은 절대 개조하지 마십시오.
2. 보수, 점검, 수리 시 반드시 전원을 차단한 후 진행하여 주십시오.

■ 폐기

제품을 폐기할 경우에는 산업폐기물로서 취급하여 주십시오.

MEMO

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MEMO

A series of horizontal dashed lines for writing.