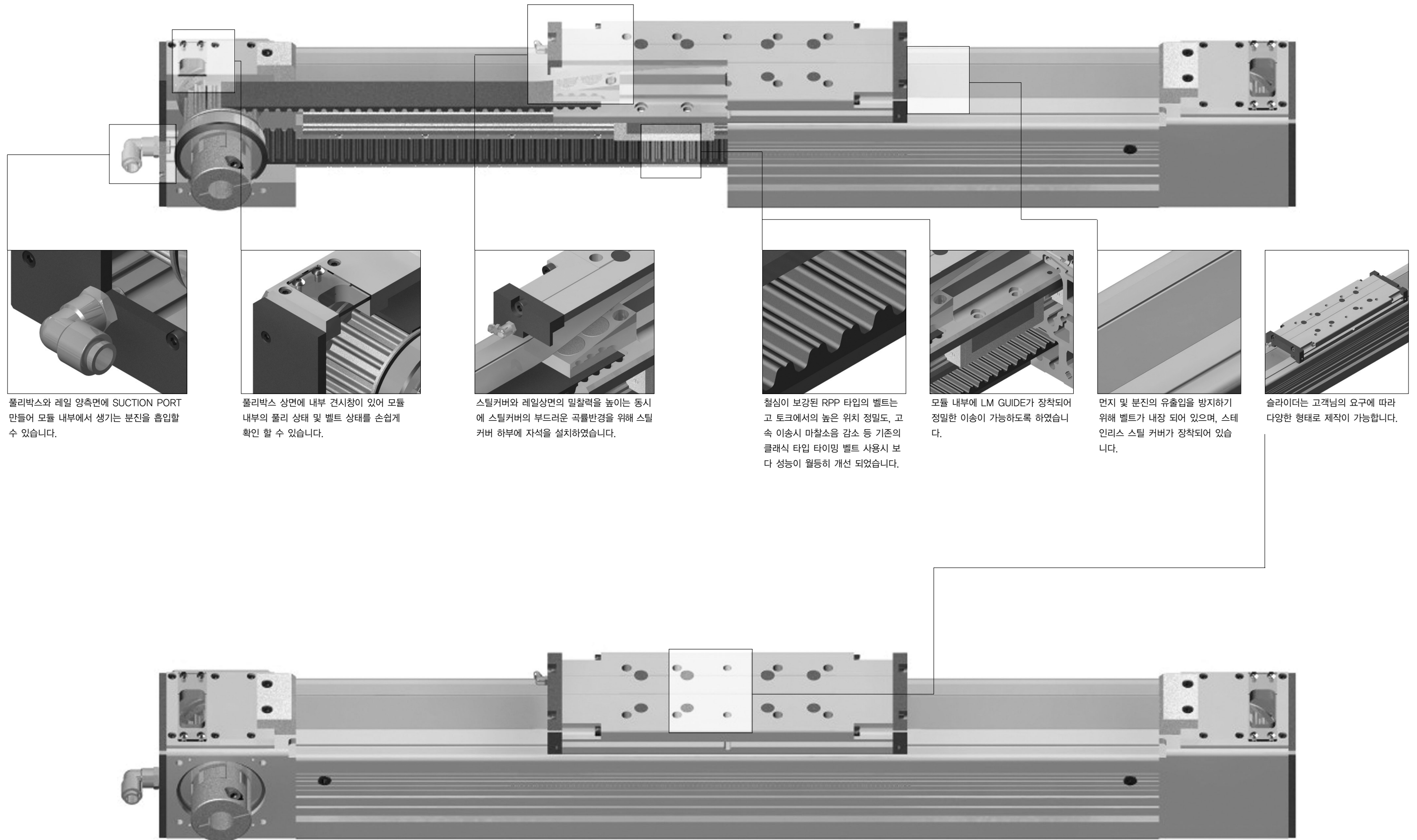


LM GUIDE 부착 Clean 타입 벨트 구동 리니어 모듈

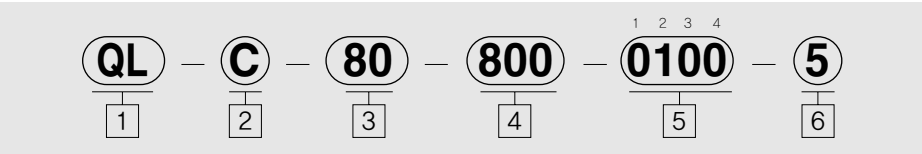




특징

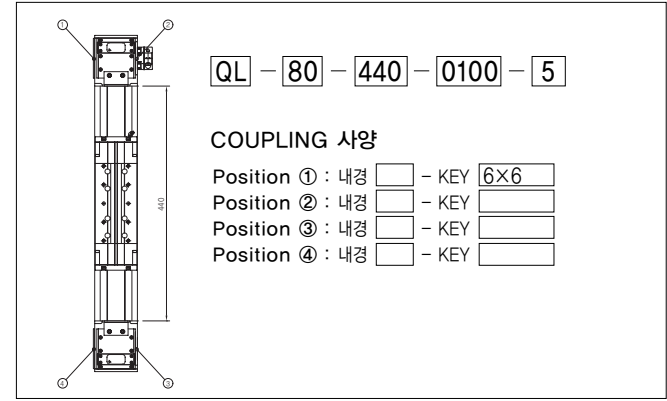
- Clean 타원의 벨트구동 모듈
- LM 가이드와 벨트구동 유닛의 결합
- 콤팩트한 디자인의 고 강성 구조
- 다양한 조합이 가능토록 설계되어 다축조합 응용 용이
- 철심 보강형 고 장력 타이밍 벨트 적용
- 마운팅, 악세사리 구성 등 다양한 고객요구에 대응
- 손쉬운 유지 보수

Order type



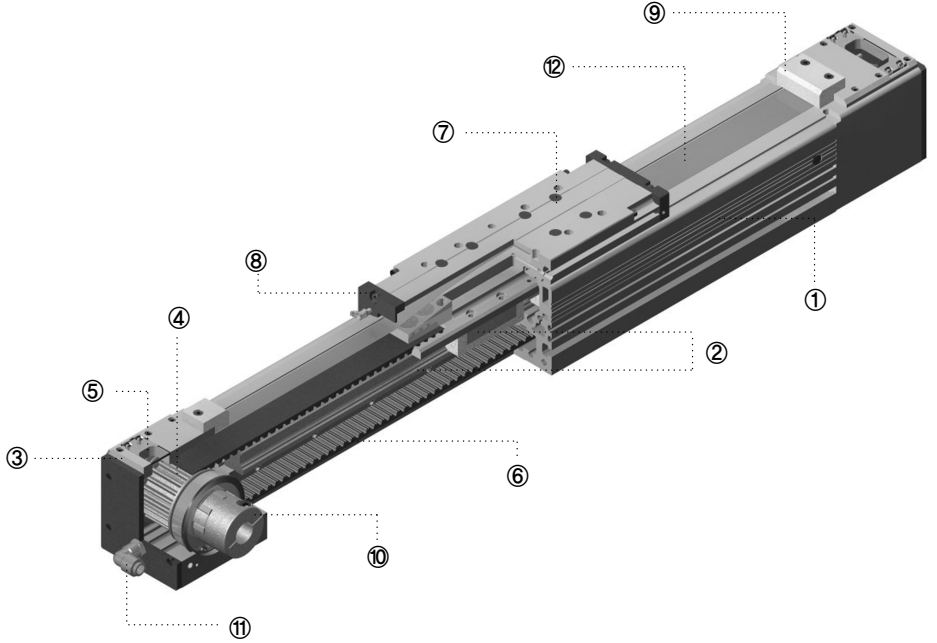
- 1 TYPE
- 2 SUCTION PORT
Non-symbol : Standard
C : SUCTION PORT 추가
- 3 Type number
80, 60, 100
- 4 Rail length
- 5 Coupling attachment type
0 : STANDARD
1 : COUPLING TYPE
2 : SHAFT TYPE
- 6 Quantity

▶ Ordering of Module



▶ Accessory

- ☐ Motor (Name of company :) (Model name :) (Power : (kw))
- ☐ MSK (Sensor Bracket) (Photo Sensor) (Proximity Sensor)
- ☐ Reducer (Pulley Reducer) (Others(Name of company :) (Model name :) (Reduction gear ratio :))
- ☐ Urethane stopper



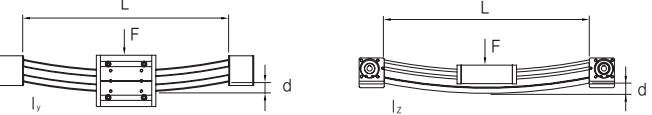
▶ Specification of Components

No	Component name	Material	No	Component name	Material
1	Rail	Aluminum alloy	7	Slider	Aluminum alloy
2	Product No.	LM GUIDE	8	Grease nipple	
	60	No.15 / 1RAIL 2BLOCK			
	80	No.20 / 1RAIL 2BLOCK			
	100	No.30 / 1RAIL 2BLOCK			
3	Pulley box	Aluminum alloy	9	STOPPER	URETHANE
4	Timing pulley	High carbon steel	10	COUPLING	Aluminum alloy
5	Observation window	PC	11	SUCTION PORT	
6	Timing belt	Aluminum alloy	12	Steel cover	Stainless

▶ Performance sheet

Repeating accuracy	±0.05mm
Straightness of rail	0.35mm/m
Parallelism between shafts	±0.02mm/m
Tolerance of length	±0.5mm

▶ Max. deflection of rail



*Formula for deflection of rail is the same to the whole dimension.

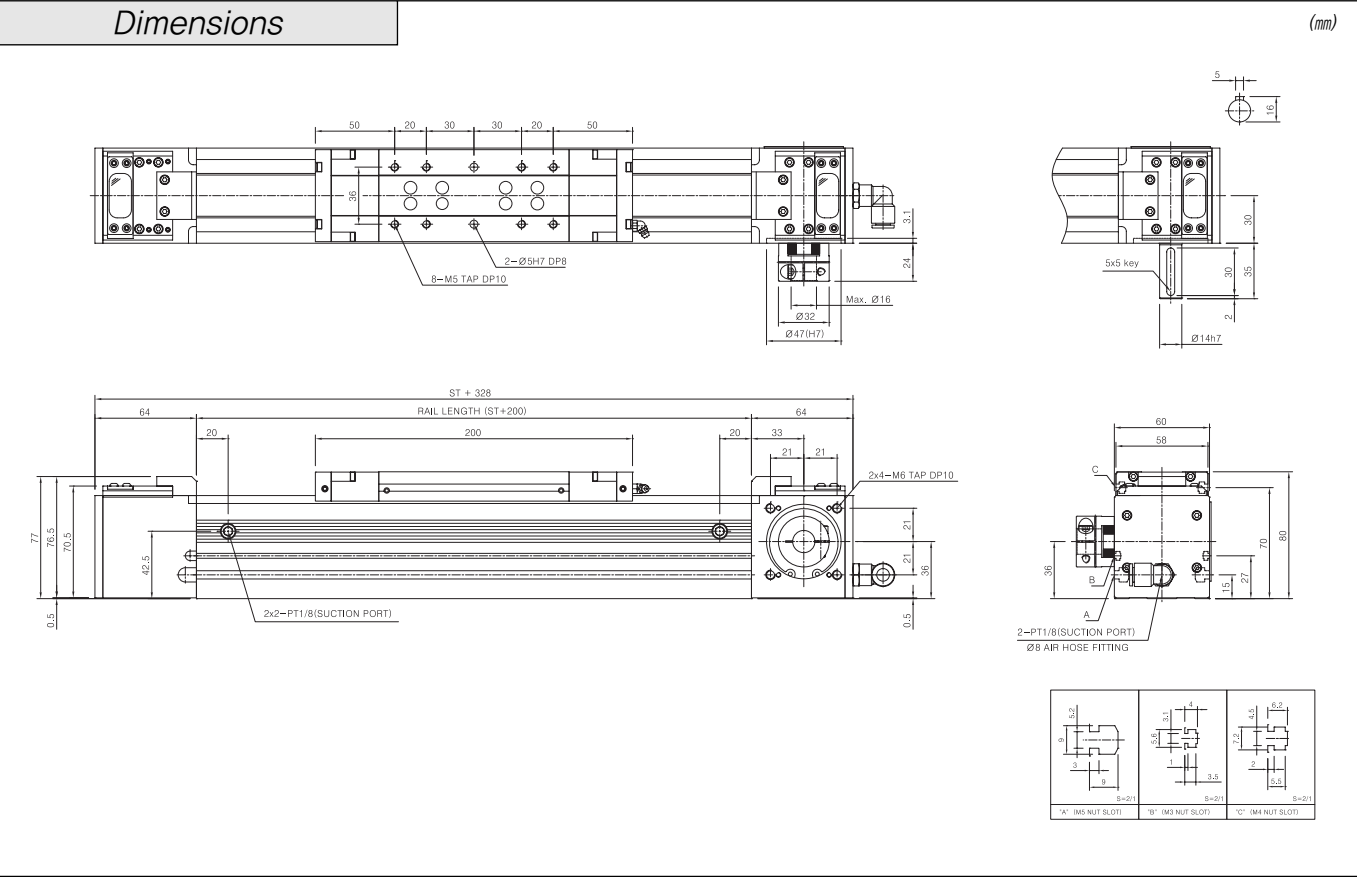
$$d = \frac{F \times L^3}{192 \times E \times I}$$

E : Young's modulus, aluminum - 70,000N/mm²
d : deflection [mm]
F : load [N]
L : free length [mm]
I : 2'nd moment of area [mm⁴]

▶ Timing belt dimension and Rail size

Model No.	Length	Belt type	Belt width	Material of velt
60	3000	RPP5	25	Polyurethane With Steel cord
80	4000	RPP8	30	
100	4000	RPP8	50	

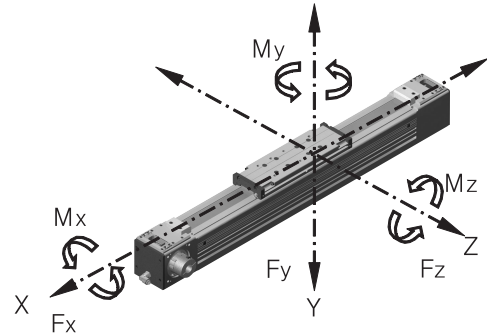
▶ LM연결없이 제작가능한 최대길이



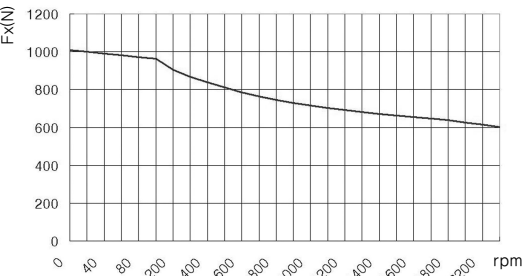
► Technical data

- Speed Max. 5%
- Acceleration Max. 20%
- Pulley P. C. D. 41.38mm
- Stroke per revolution $\approx 130\text{mm/rev.}$
- 2'nd moment of area
 $I_x = 5.28 \times 10^{-5} \text{mm}^4$
 $I_z = 6.37 \times 10^{-5} \text{mm}^4$
- No-load torque 1.0Nm
- Weights
Basic weight with zero stroke 4.2kg
Weight/100mm stroke 0.55kg

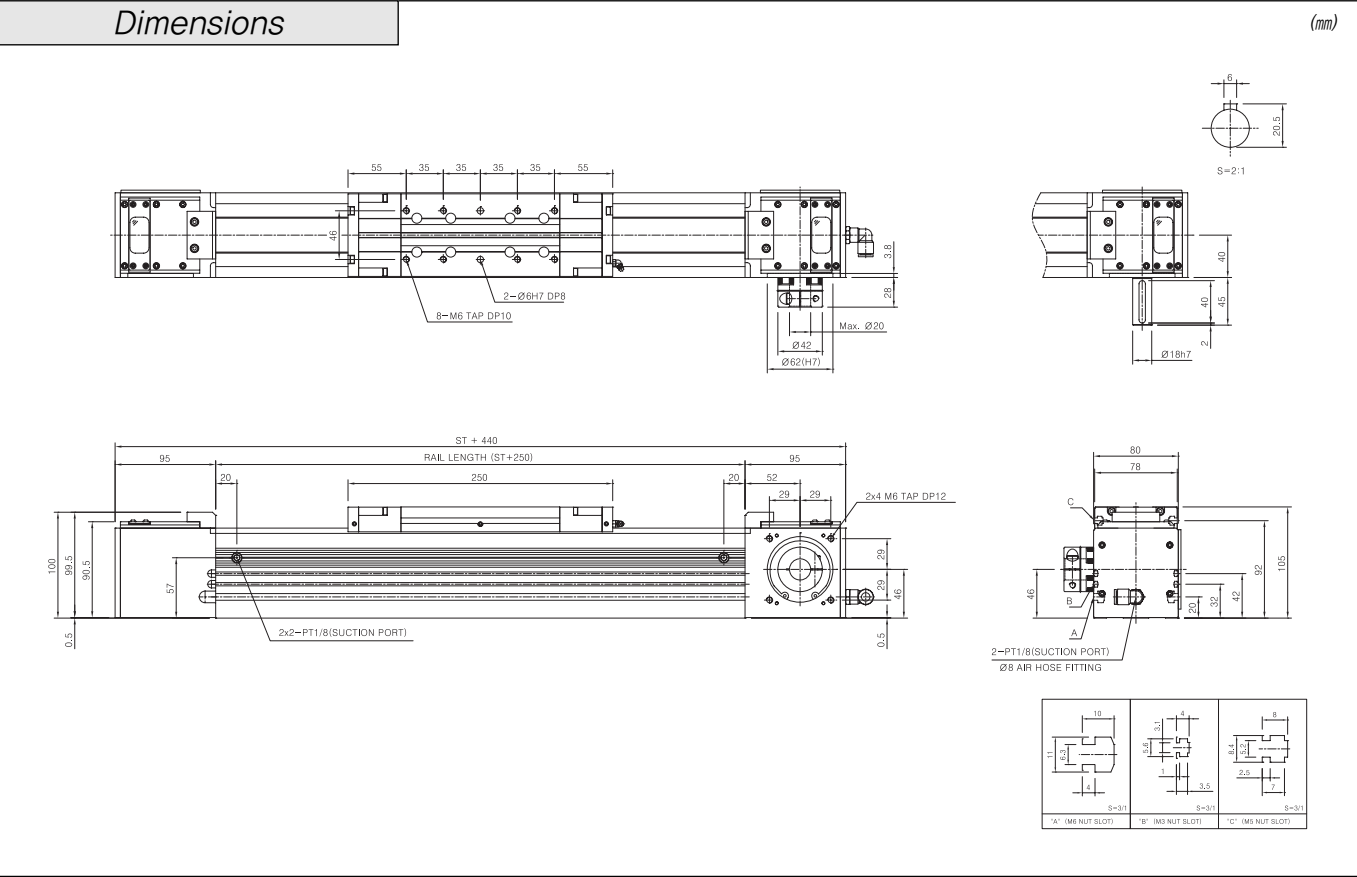
► Forces and moments



Slider Type	Lifetime in meter	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)
QL60	5000km	Max.	26,852	26,852	137	98	98
	10000km	1000	16,660	16,660	82	59	59



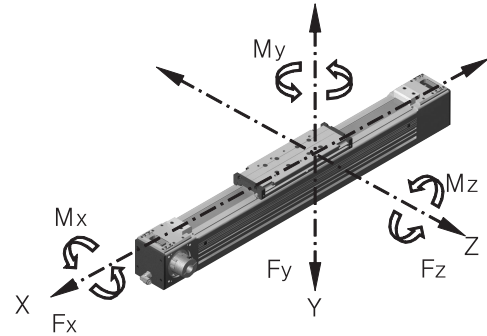
* Fx depends on speed, see respective chart.



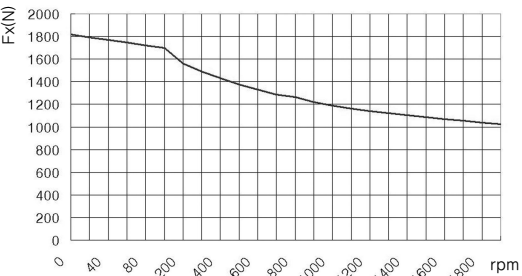
► Technical data

- Speed Max. 5%
- Acceleration Max. 20%
- Pulley P. C. D. 53.48mm
- Stroke per revolution $\approx 168\text{mm/rev.}$
- 2'nd moment of area
 $I_x = 16.4 \times 10^{-5} \text{mm}^4$
 $I_z = 20 \times 10^{-5} \text{mm}^4$
- No-load torque 1.4Nm
- Weights
Basic weight with zero stroke 11.3kg
Weight/100mm stroke 1.13kg

► Forces and moments

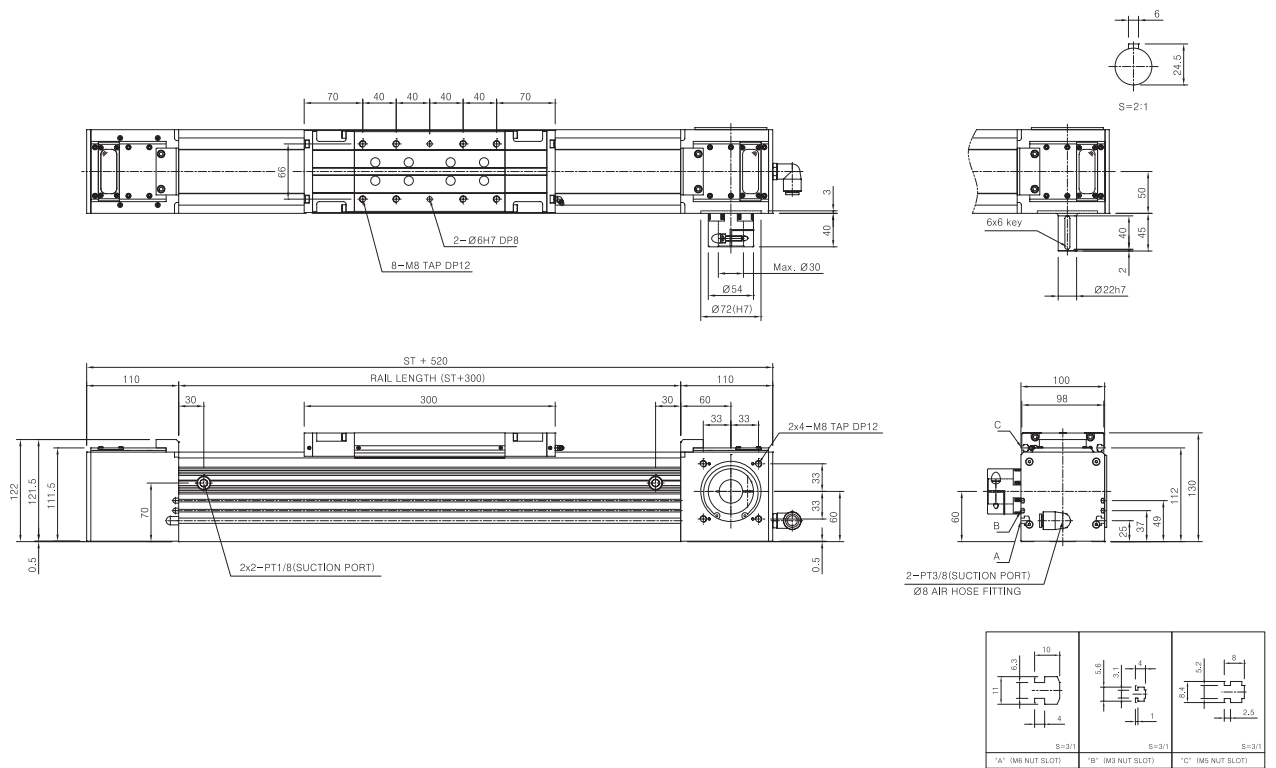


Slider Type	Lifetime in meter	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)
QL80	5000km	Max.	50,176	50,176	432	353	353
	10000km	2044	28,420	28,420	259	212	212



* Fx depends on speed, see respective chart.

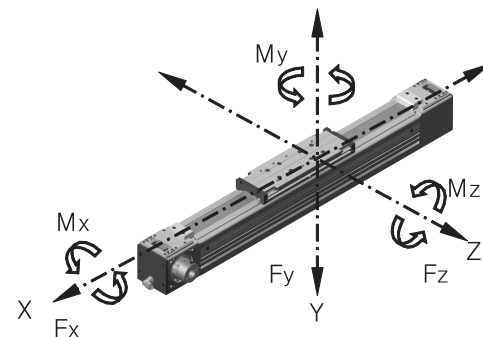
Dimensions



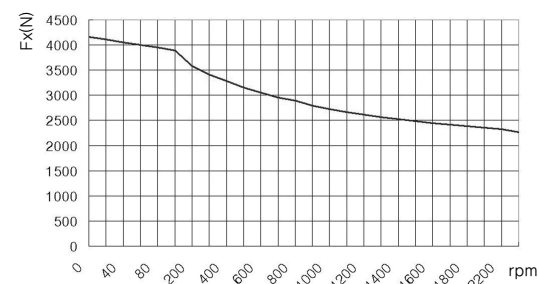
► Technical data

- | | |
|----------------------------------|--|
| • Speed | • Max. 5% |
| • Acceleration | • Max. 20% |
| • Pulley P. C. D. | • 68.75mm |
| • Stroke per revolution | • $\approx 216\text{mm/rev.}$ |
| • 2 nd moment of area | • $I_y = 39,1 \times 10^6 \text{mm}^4$
• $I_z = 51,7 \times 10^6 \text{mm}^4$ |
| • No-load torque | • 1.8Nm |
| • Weights | |
| Basic weight with zero stroke | • 20.5kg |
| Weight/100mm stroke | • 1.6kg |

► Forces and moments



Slider Type	Lifetime in meter	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)
QL100	5000km	Max.	107,604	107,604	1,177	981	981
	10000km	4540	58,408	58,408	706	589	589

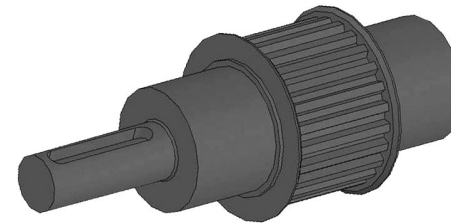


* Fx depends on speed, see respective chart.

PULLEY OPTION

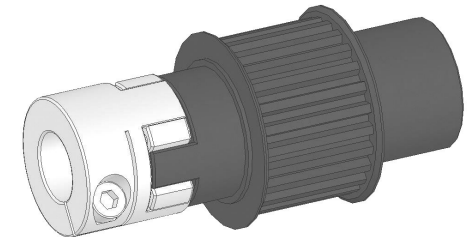
- PSH Type

One body type pulley that having driving shaft



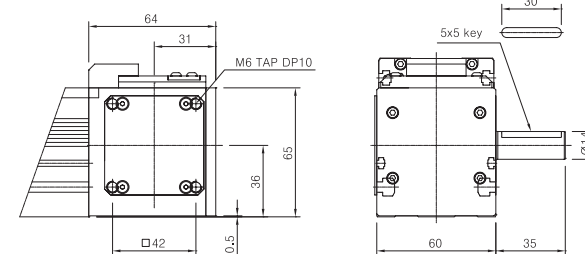
- PCP Type

This type pulley is joined with Jaw-coupling directly and supplied with coupling.

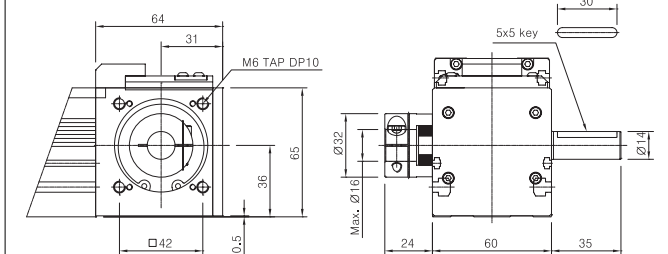


QL60

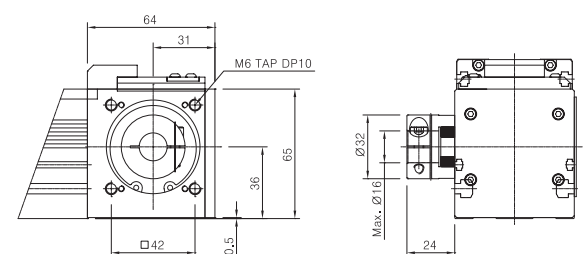
PSH-S



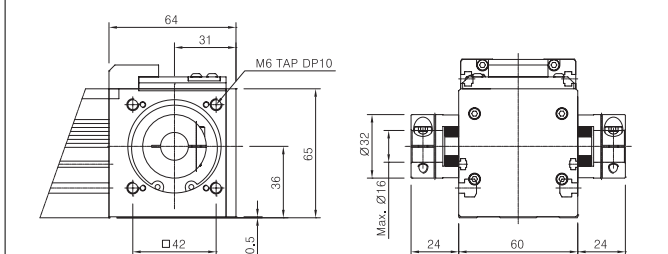
PSH-C



PCP-S

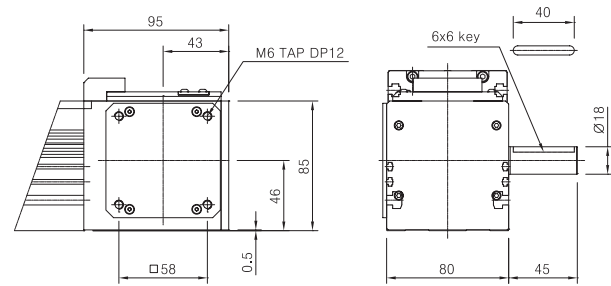


PCP-D

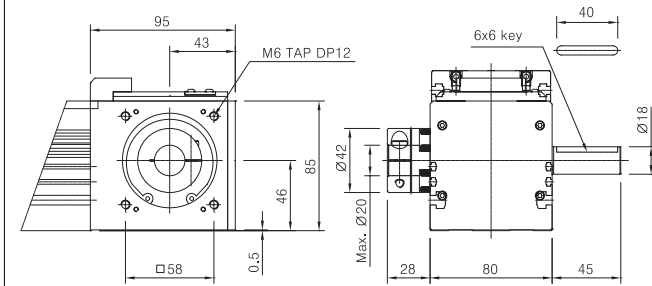


QL80

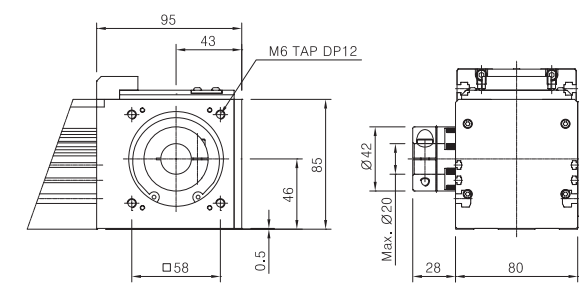
PSH-S



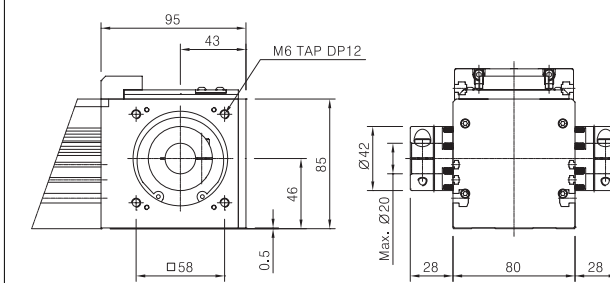
PSH-C



PCP-S

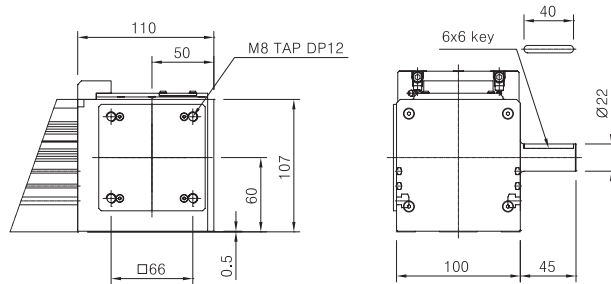


PCP-D

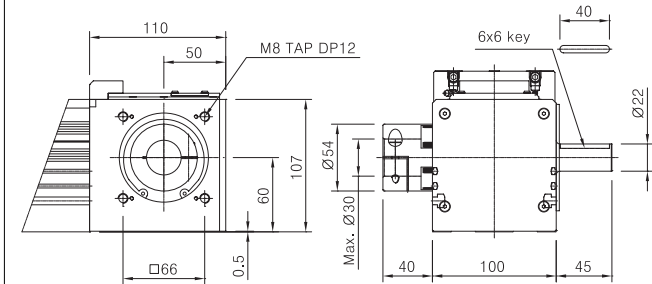


QL100

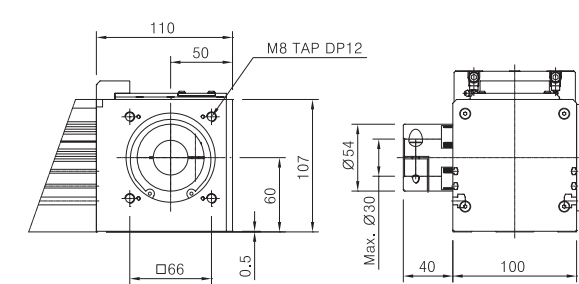
PSH-S



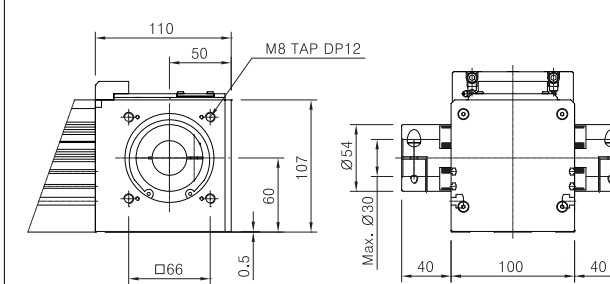
PSH-C



PCP-S

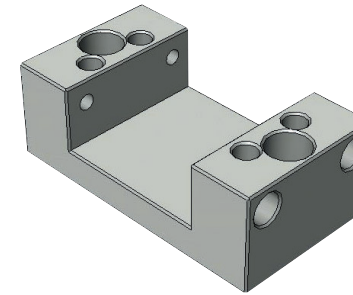


PCP-D



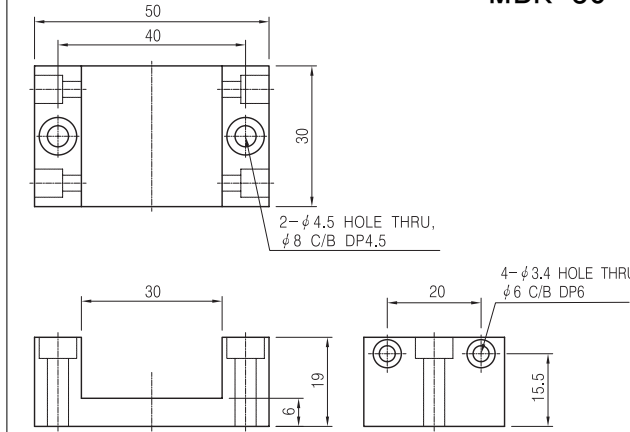
MOUNTING BLOCK

Mounting block

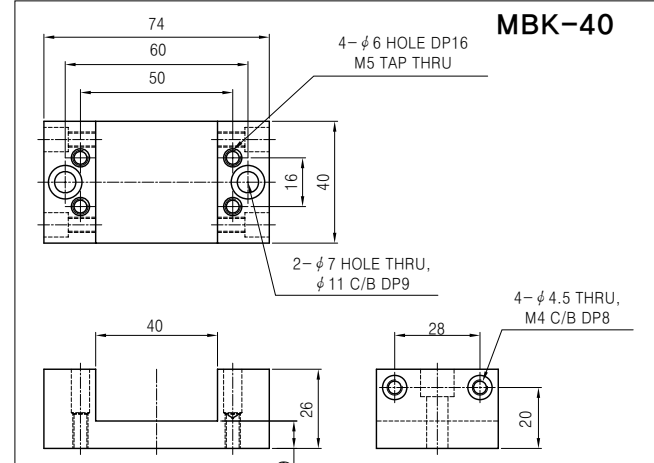


- Mounting block for M and Q series
- A component for firm mounting with attaching at linear module
- High precision and strength guaranteed by one-bodied processing of aluminum alloy material
- Possible for additionally attaching along with linear module lengths

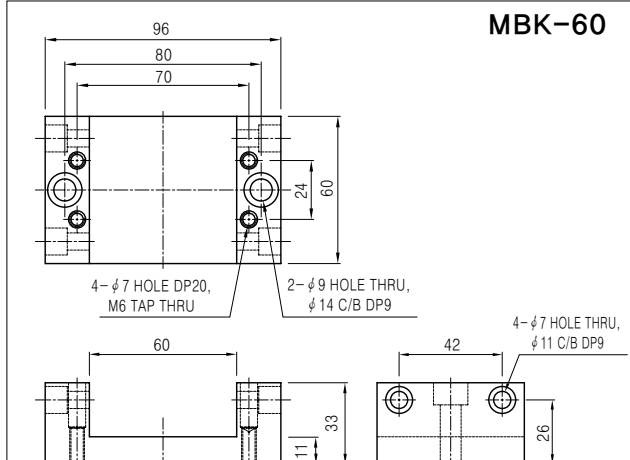
MBK-30



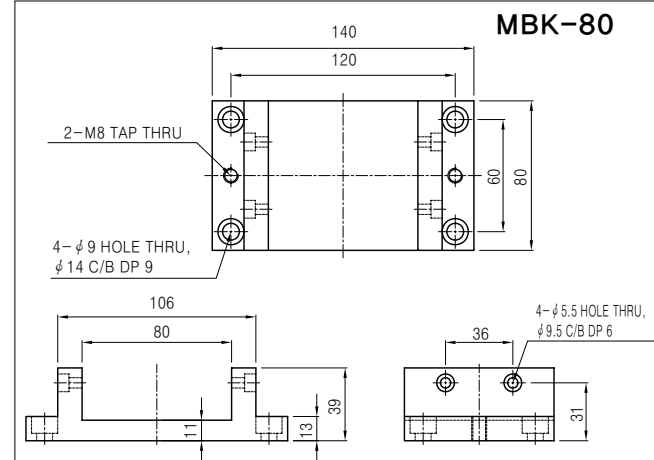
MBK-40



MBK-60



MBK-80



MBK-100

