Alpha Clean Robot

ACR
Alpha Clean Robot

FEATURE

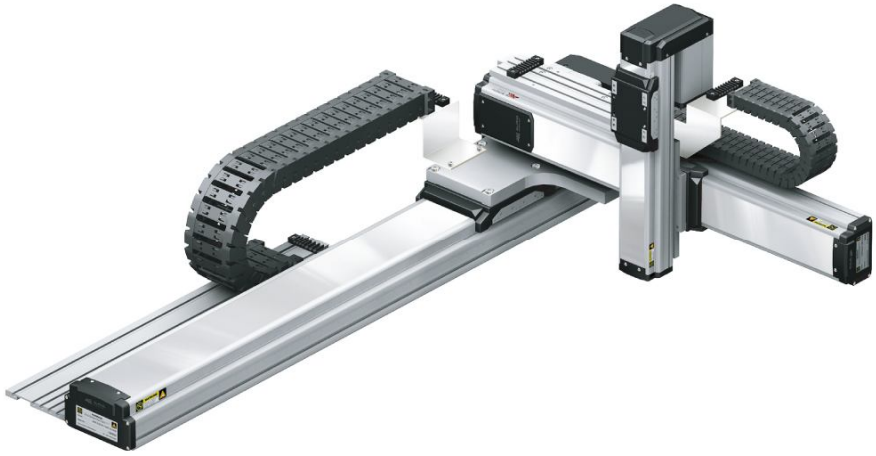
- Various application is possible due to the greatest cartesian robot line-up.
  세계최대의 직교로봇 라인업으로 다양한 어플리케이션 지원
- All series line-up solving problems of designers and users.
  설계자와 user의 고민을 해결한 전 시리즈 라인업
- Greatest function among same grade robots through high rigidity by FME analysis.
  FME 기구해석으로 고강성을 실현한 동급 최강의 성능
- Various application is possible through Building Block System.
  빌딩블럭 시스템 채용으로 다양한 어플리케이션 지원
- Patent technology, class 10 and under of non-contact magnetic leviatation technology, overcomes demerits of traditional frictional movement such as noise, short life, and low class of clean room application.
  세계최초 비접촉 자기부상 기술로 종래 마찰식 구동방식의 단점(소음발생, 수명단축, 클린도저하)을 보완한 특허기술 적용으로 Class10 이하를 실현함
- Dust-proof structure makes it possible to protect foreign materials so as to extend life of products and cycle time of maintenance.
  클린형 방진 구조로 이물질이 본체 내부로 유입되는 것을 방지하여 제품수명 및 Maintenance 주기가 길어짐
- In case of combination of X, Y, Z axes, optimum assembly of brackets and cable ducts realizes maximum functions of high rigidity, high speed, and high accuracy.
  기구해석 X.Y.Z조합 시 최적의 조합이 가능하여 고강성, 고속, 고정도의 탁월한 성능발휘
- Application of motor cable connector and cable mount for clean cable treatment extends the life of wires and cables.
  케이블 처리를 위한 모터케이블 커넥터 및 케이블마운트 적용으로 배선 및 케이블 수명 연장
- Environment-friendly system with low lint, dust-proof, low noise.
  저발진,방진, 저소음 으로 친환경 시스템 적용
- High rigid structure by FME analysis overcomes demerits of other manufacturers' clean robots.
  FME 기구해석으로 고강성을 실현한 구조로 기존(타사)의 클린로봇 단점 보완
- Clean class 10.
  크린도 10
- Realizaton of high speed by 2m/s of Maximum speed.
  최대속도 2m/s 으로 고속화 실현

- Non-contact magnetic levitation technology overcomes such demerits of Air cylinder as noise, short life of product, low class of clean room application and guarantees such points as no friction movement, high speed, and low noise.
  타사의 마찰식 구동방식의 단점(소음발생, 수명단축, 클린도저하)을 비접촉식 자기 부상 슬라이딩 방식(특허기술) 채용으로무마찰, 고속, 고정도 실현
- With non-contact magnetic levitation technology, when applied in Y axis, breakaway of band and bending of frame are prevented.
  Y축 적용 시 밴드의 탈조 및 휨 방지 시스템 적용
- Application of greatest high load system.
  동급최강의 고하중 시스템 적용
- With application of sense wiring duct, easy maintenance and assembly, positioning adjustment, and high reliability are guaranteed.
  센서 배선용 덕트 채용으로 유지보수, 조립, 위치조정이 용이하여 메인터넌스 및 고 신뢰성 확보
- Equipped with individual sense dog and cableveyor, high functionality in single axis and assembled multi axes is realized.
  슬라이드에 센서도그 및 케이블베어의 독립 장착구조로 단축 및 조합축 적용 시 탁월한 성능발휘
- Standardization of dedicated assembly brackets for high moment load allows optimum functionality in case of XY combination.
  고강성 모멘트하중 전용 신형 조합브라켓을 표준으로 XY 조합 시 탁월한 성능발휘
- No need of special and extra bracket due to standard cable chain duct system.
  표준 케이블체인 덕트 시스템 채용으로 별도 브라켓없이 슬라이드에 조립가능 구조
- With patent technology of high rigid, speed, load structure, applied in such industries as Semi-conduct, Nano-technology, IT fields(Cellular phone, LCD, PDP, GPS, etc).
  고강성, 고속, 고하중 의 기구특성의 특허기술 적용으로 반도체, 나노, IT 분야(핸드폰, LCD,PDP, GPS, 노트북, 디스플레이) 일반산업 등 다양한 산업 적용

CLEAN ROOM ROBOT ORDER INFORMATION

A ACR SERIES

ACR-∑9	-	S	1	-	500	-	10	N	-	H
1		2	3		4		5	6		7



1 CLEAN CLASS SERIES
2 SHAPE
3 SLIDE TABLE TYPE
4 STROKE (mm)
5 MOTOR RATED OUTPUT
6 BRAKE OPTION
7 SPEED (mm/s)

B Options

I	-	H	LF	B	55	-	W	-	N	-	F00
1		2	3	4	5		6		7		8

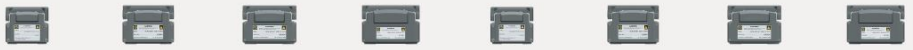
1 SENSOR
2 3 4 5 CABLEVEYOR
6 COLOR OF ROBOT
7 SURFACE TREATMENT
8 CABLE LENGTH

CLEAN ROOM ROBOT ORDER INFORMATION

Σ Standard (Clean class 1000)

ΣV Vacuum type (Clean class 10)

ALPHA Clean Robot



ACR-Σ9 | ACR-Σ12 | ACR-Σ16 | ACR-Σ20 | ACR-ΣV9 | ACR-ΣV12 | ACR-ΣV16 | ACR-ΣV20

S Straight Type

PL Parallel Left Type

PR Parallel Right Type

PU Parallel Under Type

1 Standard Type

10 100W **20** 200W **40** 400W **75** 750W

N Without Brake **B** With Brake

L Low Speed Type 250 mm/s **N** Normal Speed Type 500 mm/s **H** High Speed Type 1000 mm/s

I Internal Sensor (Standard) **E** External Sensor

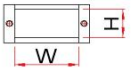
2 Attaching Type

N None **H** Horizontal **W** Wall Hanging **R** Rear

3 Cableveyor direction

LF Left - Front **RF** Right - Front
LR Left - Rear **RR** Right - Rear

4 Cableveyor selection (Hmm × Wmm)



Standard	CPS	B 28×35	C 28×55	D 28×75	E 28×100	* Please see the catalogue C30.3 for more information of cableveyor.
Cleanroom	IGUS	F 29×40	G 29×60	H 29×80	I 29×100	* 케이블베어에 대한 상세한 정보는 본 카탈로그 C30.3 페이지를 참조 바랍니다.
	TSUBAKI	J 28×40	K 28×60	L 28×80	M 28×100	

5 The radius of curvature (mm)

*1 **45** R40 ~ R45 **55** R50 ~ R55 **75** R70 ~ R75 *2 **95** R90 ~ R95 *3 **100** R100

* 1,* 2,* 3 are non-standard
* 1, * 2, * 3 은 비표준 입니다.

W White (Standard) **B** Black Anodizing

N Surface Treatment (Standard) **R** Raydent Surface Treatment (LM Rail)

Flexible Cable

F00 None **F03** 3m **F05** 5m **F07** 7m **F10** 10m

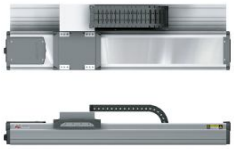
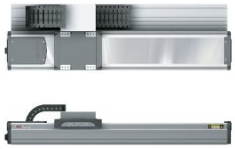
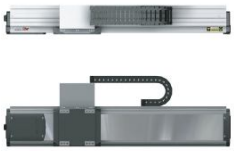
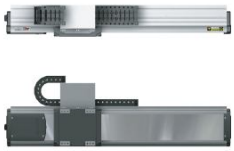
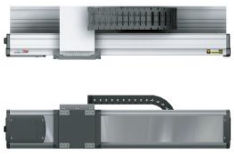
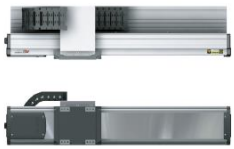
* Please do not hesitate to contact us when the cable is applied more than 10m.
* 케이블 길이가 10m 이상일 경우에는 폐사와 협의 바랍니다.

B CLEAN ROOM ROBOT ORDER INFORMATION - OPTIONS

2 3 4 5 Cableveyor Selecting Options

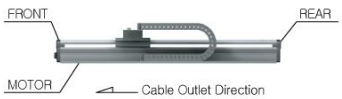
Series	Applicable Type			
	Horizontal	Wall Hanging	Rear	Double
ACR	●	●	●	

2 3

Applicable Type	Cableveyor Directions			
N None NOTE1	L F Left-Front	R F Right-Front	L R Left-Rear	R R Right-Rear
H Horizontal				
W Wall Hanging				
R Rear				
D Double				

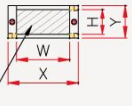
3

Cableveyor Directions

L F	Cableveyor Mounted Direction		Cable Outlet Direction	
Cableveyor Mounted Direction Cable Outlet Direction	L Left	R Right	F Front	R Rear
				

4 5 * Cableveyor Selecting

Unit : mm



Wiring space (Pic 10-1)

STANDARD							CLEANROOM																	
Selecting Item	Internal dimentions		External dimentions		Radius	Capacity (mm²)	Selecting Item	Internal dimentions		External dimentions		Radius	Capacity (mm²)	Selecting Item	Internal dimentions		External dimentions		Radius	Capacity (mm²)
	H	W	Y	X	R	NOTE2 Origin		H	W	Y	X	R	NOTE2 Origin		H	W	Y	X	R	NOTE2 Origin
A	24	47	31	59.5	45	1128	F	29	40	35	59.5	45	1160	J	28	40	35	60	45	1120
B	28	35	35	79.5	55	980	G		60		79.5	55	1740	K		60		80	55	1680
C		55		99.5	75	1540	H		80		99.5	75	2320	L		80		100	75	2240
D		75		119.5	95	2100	I		100		119.5	95	2900	M		100		120	95	2800
E		100		139.5	100	2800	-			-	-	100	-	-			-	-	100	-

CAUTION

*Be sure to install in the direction as specified individually.
*Installation in any other way will cause a failure.
*For requirement of installation in any way other than the above standard installation, please consult Head Office and Agent.

NOTE1 In case that cableveyor is not affixed, it does not need to mark cableveyor specification and instead, just mark 'N'(none).
NOTE2 Please select the floor area ratio by user's using environment, using condition at below 60%

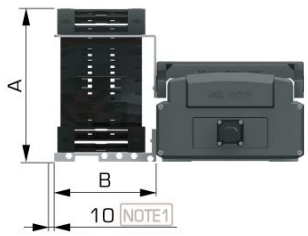
주의

*반드시 개별적으로 지정한 방향으로 설치해 주십시오.
*상기 표준 이외의 방법으로 설치하는 것은 고장의 원인이 됩니다.
*상기 표준 이외의 방법으로 설치할 경우에는 대리점 및 당사에 문의바랍니다.

NOTE1 케이블베어를 장착하지 않을 경우에는 "N"(None)만 표기하고 다른 케이블베어 사양은 표기하지 않습니다.
NOTE2 용적률은 사용자의 사용환경, 사용조건에 따라 60%이하로 적절히 선정하십시오.

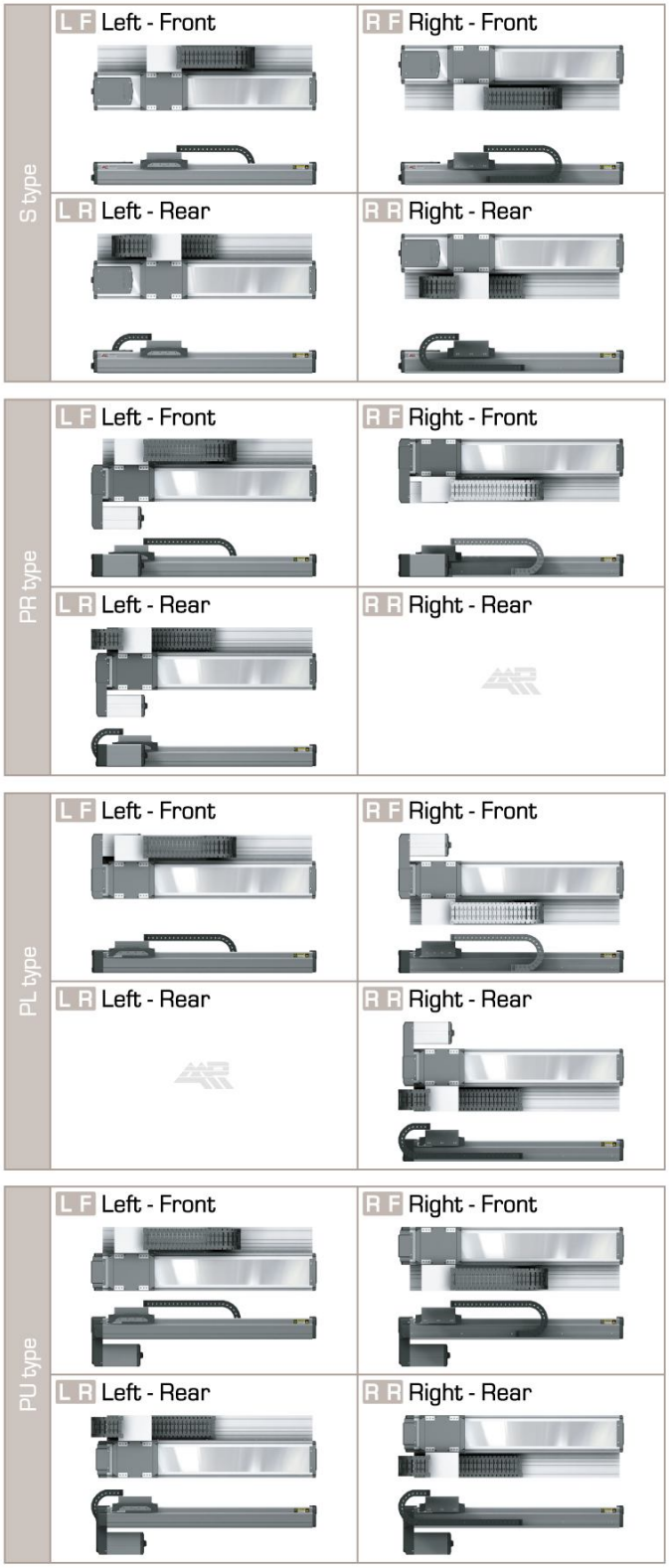
B CLEAN ROOM ROBOT ORDER INFORMATION - OPTIONS

2 H Horizontal Type



BASE SIZE	CABLEVEYOR		S1	
	Bending radius R	Internal dimentions	A	B
ACR090	R055	35, 40	162	80
		55, 60	162	98
ACR120	R055	35, 40	164	98
		55, 60	164	118
ACR160	R055	55, 60	186	98
		75, 80	186	118
ACR200	R075	55, 60	208	98
		75, 80	208	118

3 NOTE2 Cableveyor Directions



NOTE1 This is a minimum space allowance between Cableveyor and external interference when robot drives.
NOTE2 For the information of Cable veyor of blank, please contact a distributor or our company.

NOTE1 로봇을 구동할 때에 케이블베어와 외부 간섭과의 최소여유치수입니다.
NOTE2 빈칸의 케이블베어 장착은 영업점 및 폐사에 문의 바랍니다.

B CLEAN ROOM ROBOT ORDER INFORMATION - OPTIONS

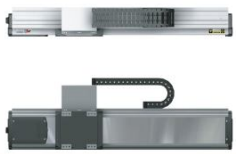
2 W Wall Hanging Type

BASE SIZE	CABLEVEYOR		S1	
	Bending radius R	Internal dimentions	A	B
ACR090	R055	35, 40	150	98
		55, 60	150	118
ACR120	R055	35, 40	150	118
		55, 60	150	118
ACR160	R055	55, 60	150	138
		75, 80	150	138
ACR200	R075	55, 60	150	138
		75, 80	150	138

3 NOTE2 Cableveyor Directions

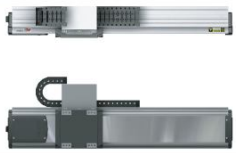
S type

L F Left - Front



R F Right - Front

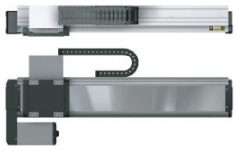
L R Left - Rear



R R Right - Rear

PR type

L F Left - Front



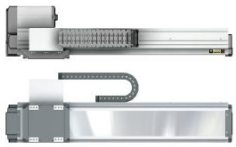
R F Right - Front

L R Left - Rear

R R Right - Rear

PU type

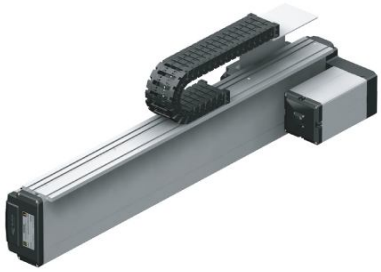
L F Left - Front



R F Right - Front

L R Left - Rear

R R Right - Rear



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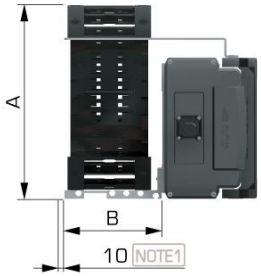
B CLEAN ROOM ROBOT ORDER INFORMATION - OPTIONS

2 R Rear Type

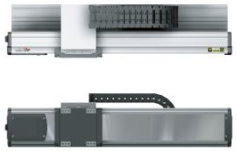


BASE SIZE	CABLEVEYOR		S1	
	Bending radius R	Internal dimentions	A	B
AR090	R055	35, 40	152	80
		55, 60	152	98
AR120	R055	35, 40	187	98
		55, 60	187	118
AR160	R055	55, 60	226	118
		75, 80	226	138
AR200	R075	55, 60	226	118
		75, 80	226	138

3 NOTE2 Cableveyor Directions

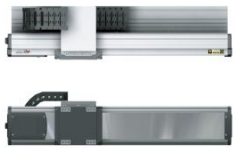
S type

L F Left - Front



R F Right - Front

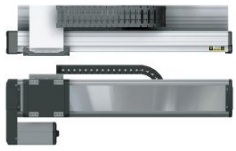
L R Left - Rear



R R Right - Rear

PR type

L F Left - Front



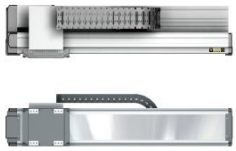
R F Right - Front

L R Left - Rear

R R Right - Rear

PU type

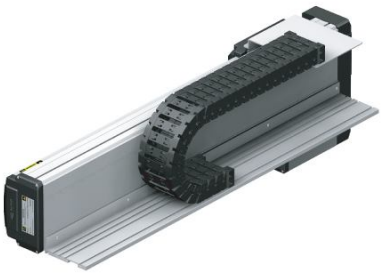
L F Left - Front

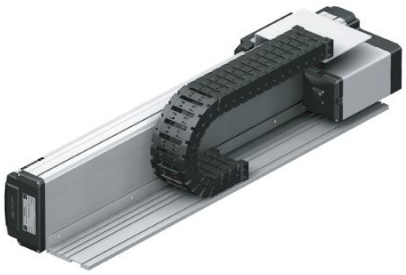


R F Right - Front

L R Left - Rear

R R Right - Rear





NOTE1 This is a minimum space allowance between Cableveyor and external interference when robot drives.
NOTE2 For the information of Cable veyor of blank, please contact a distributor or our company.

NOTE1 로봇을 구동할 때에 케이블베어와 외부 간섭과의 최소 여유치수입니다.
NOTE2 빈칸의 케이블베어 장착은 영업점 및 폐사에 문의 바랍니다.

ALPHA CLEAN ROBOT SPECIFICATIONS

Product		Rated Output	Ball Screw※1		Max. Speed※4		Max. Load (H)	Max. Load (V)
		w	E.D	Lead	mm/s		50 100 150 200 kg	50 100 150 200 kg
ACR-Σ SERIES	Σ9	100	Φ15	10	N	500	12	8
		100	Φ15	20	H	1000	2	2
		200	Φ15	10	N	500	30	16
		200	Φ15	20	H	1000	28	8
	Σ12	200	Φ15	10	N	500	50	22
		200	Φ15	20	H	1000	28	10
		400	Φ15	10	N	500	50	38
		400	Φ15	20	H	1000	45	20
	Σ16	400	Φ15※2	10	N	500	80	40
		400	Φ15※2	20	H	1000	35	20
		400	Φ20※2	10	N	500	75	40
		400	Φ20※2	20	H	1000	30	20
		750	Φ15※2	10	N	500	80	45
		750	Φ15※2	20	H	1000	70	30
		750	Φ20※2	10	N	500	80	45
		750	Φ20※2	20	H	1000	70	30
	Σ20	750	Φ20※3	10	N	500	120	60
		750	Φ20※3	20	H	1000	90	38
		750	Φ25※3	10	N	500	120	60
		750	Φ25※3	20	H	1000	70	38

※1 : Accuracy class of Ball screw is C7. ※2 : Below stroke 500mm, Φ15 applied. Above stroke 500mm, Φ20 applied.
※3 : Below stroke 800mm, Φ20 applied. Above stroke 800mm, Φ25 applied.
※1 : 볼 스크류 정도는 C7 입니다. ※2 : 스트로크 500mm 이하는 Φ15 적용, 스트로크 500mm 이상은 Φ20 적용
※3 : 스트로크 800mm 이하는 Φ20 적용,스트로크 800mm 이상은 Φ25 적용

PRO GRAM | mm | mm/s | kg

Repeatability mm	Max. Stroke ※5 (100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500)	mm	Page no.
±0.02	500 492 388 313 258	1000	C31.1 ~ 2
±0.02	1000 984 775 627 517	1000	C31.1 ~ 2
±0.02	500 492 388 313 258	1000	C31.1 ~ 2
±0.02	1000 984 775 627 517	1000	C31.1 ~ 2
±0.02	500 474 375 304 251 211 180	1200	C32.1 ~ 2
±0.02	1000 948 750 608 503 423 361	1200	C32.1 ~ 2
±0.02	500 474 375 304 251 211 180	1200	C32.1 ~ 2
±0.02	1000 948 750 608 503 423 361	1200	C32.1 ~ 2
±0.02	500 451 359 292 243 205 175	1200	C33.1 ~ 2
±0.02	1000 902 718 584 485 409 350	1200	C33.1 ~ 2
±0.02	500 494 402 334 282 241 208	1300	C33.1 ~ 2
±0.02	1000 988 805 668 563 482 416 364 320 284	1600	C33.1 ~ 2
±0.02	500 451 359 292 243 205 175	1200	C33.1 ~ 2
±0.02	1000 902 718 584 485 409 350	1200	C33.1 ~ 2
±0.02	500 494 402 334 282 241 208	1300	C33.1 ~ 2
±0.02	1000 988 805 668 563 482 416 364 320 284	1600	C33.1 ~ 2
±0.02	500 478 391 325 275 235 204 178 157 140	1600	C34.1 ~ 2
±0.02	1000 957 782 651 550 471 408 357 314 279 250 225 203 185	2000	C34.1 ~ 2
±0.02	500 424 358 307 266 232 205 182	1600	C34.1 ~ 2
±0.02	1000 848 717 614 532 465 410 364 326 293 265 241	2000	C34.1 ~ 2

※4 : In case of 1kW and 1.5kW, Maximum speed in an operation of 2000mm/sec.　※5 : Figures of Max.Stroke of bar graph indicate Max.Speed of each stroke.

※4 : 1kW 또는 1.5kW인 경우, 최대속도 2000mm/sec　※5 : 막대 그래프 안의 수치는 상단 최대 스트로크에 대한 최대 속도를 나타냅니다.

ALPHA CLEAN ROBOT SPECIFICATIONS

Product		Rated Output	Ball Screw ※1		Max. Speed ※4		Max. Load (H)	Max. Load (V)
		w	E.D	Lead	mm/s		50 100 150 200 kg	50 100 150 200 kg
ACR-ΣV SERIES	ΣV9	100	ϕ15	10	N	500	12	8
		100	ϕ15	20	H	1000	2	2
		200	ϕ15	10	N	500	30	16
		200	ϕ15	20	H	1000	28	8
	ΣV12	200	ϕ15	10	N	500	50	22
		200	ϕ15	20	H	1000	28	10
		400	ϕ15	10	N	500	50	38
		400	ϕ15	20	H	1000	45	20
	ΣV16	400	ϕ15 ※2	10	N	500	80	40
		400	ϕ15 ※2	20	H	1000	35	20
		400	ϕ20 ※2	10	N	500	75	40
		400	ϕ20 ※2	20	H	1000	30	20
		750	ϕ15 ※2	10	N	500	80	45
		750	ϕ15 ※2	20	H	1000	70	30
		750	ϕ20 ※2	10	N	500	80	45
		750	ϕ20 ※2	20	H	1000	70	30
	ΣV20	750	ϕ20 ※3	10	N	500	120	60
		750	ϕ20 ※3	20	H	1000	90	38
		750	ϕ25 ※3	10	N	500	120	60
		750	ϕ25 ※3	20	H	1000	70	38

※1 : Accuracy class of Ball screw is C7. ※2 : Below stroke 500mm, Φ15 applied. Above stroke 500mm, Φ20 applied.
※3 : Below stroke 800mm, Φ20 applied. Above stroke 800mm, Φ25 applied.
※1 : 볼 스크류 정도는 C7 입니다. ※2 : 스트로크 500mm 이하는 Φ15 적용, 스트로크 500mm 이상은 Φ20 적용
※3 : 스트로크 800mm 이하는 Φ20 적용,스트로크 800mm 이상은 Φ25 적용

PRO GRAM | mm | mm/s | kg

Repeatability mm	Max. Stroke ※5 (100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500)	mm	Page no.
±0.02	500 492 388 313 258	1000	C35.1 ~ 2
±0.02	1000 984 775 627 517	1000	C35.1 ~ 2
±0.02	500 492 388 313 258	1000	C35.1 ~ 2
±0.02	1000 984 775 627 517	1000	C35.1 ~ 2
±0.02	500 474 375 304 251 211 180	1200	C36.1 ~ 2
±0.02	1000 948 750 608 503 423 361	1200	C36.1 ~ 2
±0.02	500 474 375 304 251 211 180	1200	C36.1 ~ 2
±0.02	1000 948 750 608 503 423 361	1200	C36.1 ~ 2
±0.02	500 451 359 292 243 205 175	1200	C37.1 ~ 2
±0.02	1000 902 718 584 485 409 350	1200	C37.1 ~ 2
±0.02	500 494 402 334 282 241 208	1300	C37.1 ~ 2
±0.02	1000 988 805 668 563 482 416 364 320 284	1600	C37.1 ~ 2
±0.02	500 451 359 292 243 205 175	1200	C37.1 ~ 2
±0.02	1000 902 718 584 485 409 350	1200	C37.1 ~ 2
±0.02	500 494 402 334 282 241 208	1300	C37.1 ~ 2
±0.02	1000 988 805 668 563 482 416 364 320 284	1600	C37.1 ~ 2
±0.02	500 478 391 325 275 235 204 178 157 140	1600	C38.1 ~ 2
±0.02	1000 957 782 651 550 471 408 357 314 279 250 225 203 185	2000	C38.1 ~ 2
±0.02	500 424 358 307 266 232 205 182	1600	C38.1 ~ 2
±0.02	1000 848 717 614 532 465 410 364 326 293 265 241	2000	C38.1 ~ 2

※4 : In case of 1kW and 1.5kW, Maximum speed in an operation of 2000mm. ※5 : Figures of Max.Stroke of bar graph indicate Max.Speed of each stroke.
※4 : 1kW 또는 1.5kW인 경우, 최대속도 2000mm/sec ※5 : 막대 그래프 안의 수치는 상단 최대 스트로크에 대한 최대 속도를 나타냅니다.

Model	ACR-Σ9 S	ACR-Σ9 PL	ACR-Σ9 PR	ACR-Σ9 PU				

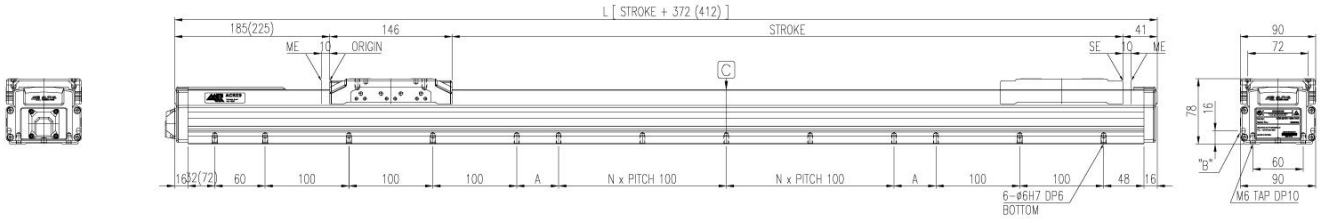
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-Σ9-S/PL-10N/20N	
ACR-Σ9-S-10N/20N			ACR-Σ9-PL-10N/20N	
Rated Output		W	100W, 3000 min⁻¹	200W, 3000 min⁻¹
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:22 (4), V:10 (4)	H:30 (28), V:16 (8)
Stroke Range		mm	100 ~ 1000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

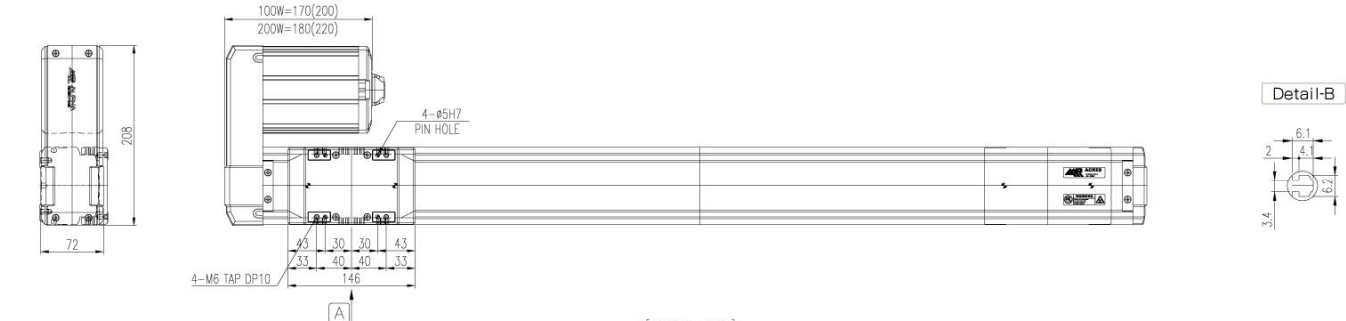
Specification			Unit	Data			
Acceleration			G	0.3			
Load			kg	5	10	20	30
Note3 Allowable Overhang Distance - mm	Horizontal Use		0°	350	260	121	74
			45°	350	242	114	70
			90°	350	350	350	350
	Wall Installation Use		0°	350	350	350	350
			45°	350	240	112	70
			90°	350	268	125	77
	Vertical Use		0°	350	245	123	82
			45°	260	130	65	44
			90°	350	243	122	81
	Estimated Condition			Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
				Life in traveled distance : 30000 km			

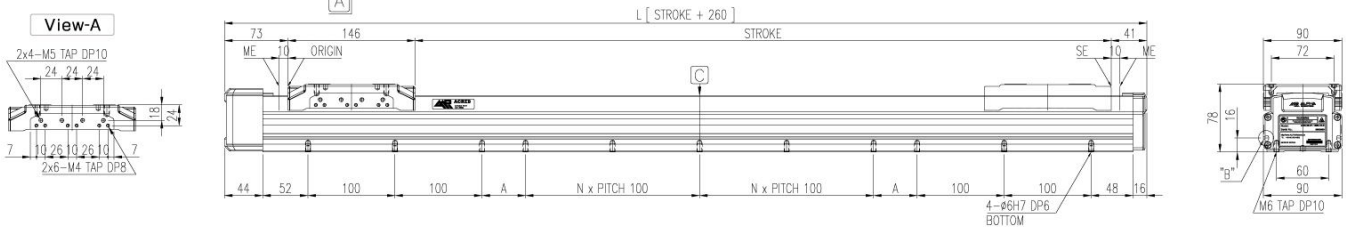
ACR-Σ9-S-10N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ9-PL-10N/20N





Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ9-S-10N	kg	7.05	7.88	8.71	9.54	10.37	11.20	12.03	12.86	13.69	14.52	0.83

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ9-S-N	mm/s	500						492	388	313	258	
	ACR-Σ9-S-H	mm/s	1000						984	775	627	517	

⚠ CAUTION ※ 한글번역은 C10.1 Page 를 참조하시기 바랍니다.

Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.

Model	ACR-Σ9 S	ACR-Σ9 PL	ACR-Σ9 PR	ACR-Σ9 PU				

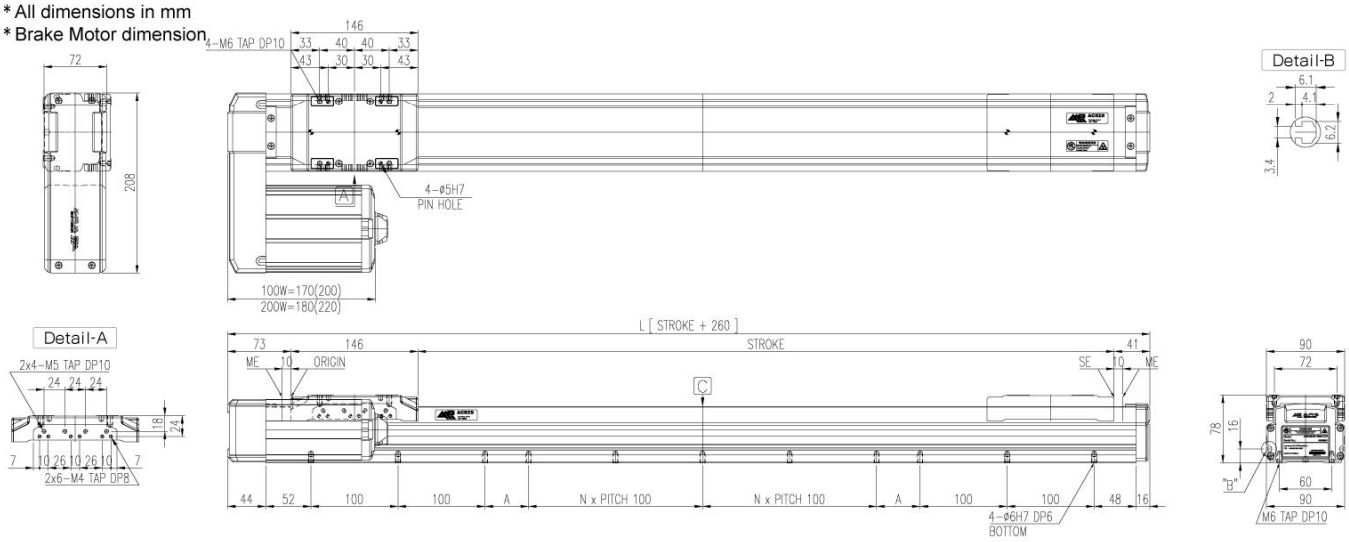
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-Σ9-PR/PU-10N/20N	
ACR-Σ9-PR-10N/20N			ACR-Σ9-PU-10N/20N	
Rated Output		W	100W, 3000 min⁻¹	200W, 3000 min⁻¹
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:12 (2) V:8 (2)	H:30 (28) V:16 (8)
Stroke Range		mm	100 ~ 1000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

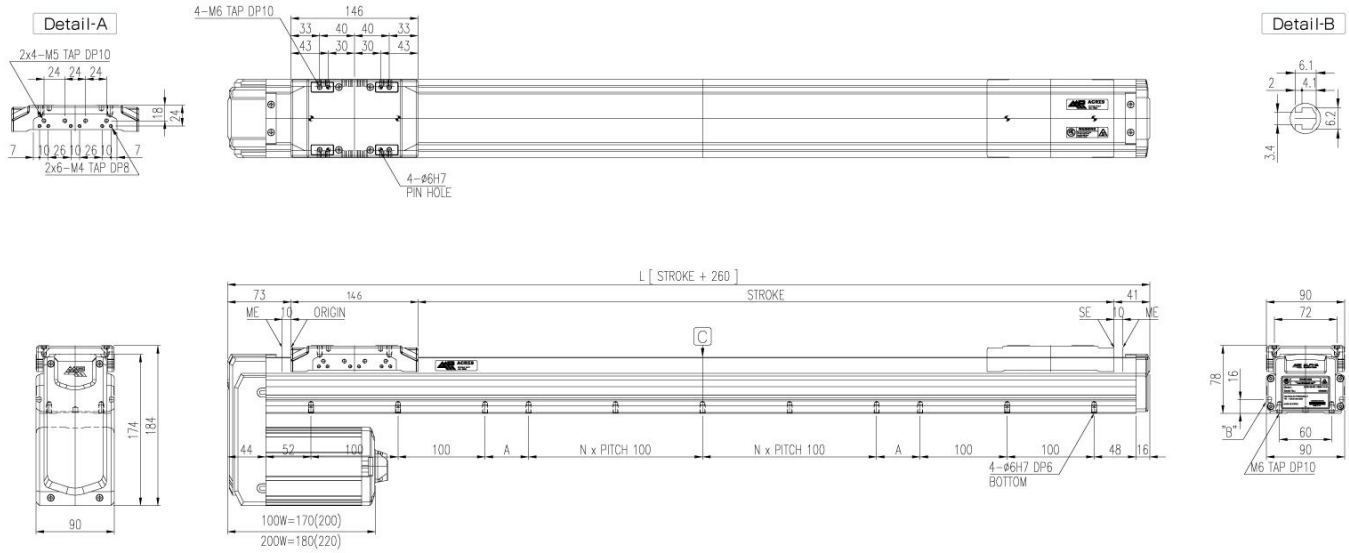
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	5	10	20	30
Note3 Allowable Overhang Distance - mm	Horizontal Use	0°	350	260	121	74
		45°	350	242	114	70
		90°	350	350	350	350
	Wall Installation Use	0°	350	350	350	350
		45°	350	240	112	70
		90°	350	268	125	77
	Vertical Use	0°	350	245	123	82
		45°	260	130	65	44
		90°	350	243	122	81
	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-Σ9-PR-10N/20N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ9-PU-10N/20N



	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-Σ9-PR/PU-10N	kg	6.29	7.12	7.95	8.78	9.61	10.44	11.27	12.10	12.93	13.76	0.83
	ACR-Σ9-PR/PU-20N	kg	6.75	7.58	8.41	9.24	10.07	10.90	11.73	12.56	13.39	14.22	0.83
Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ9-PR/PU-N	mm/s	500						492	388	313	258	
	ACR-Σ9-PR/PU-H	mm/s	1000						984	775	627	517	

⚠ CAUTION ※ 한글번역은 C10.1 Page 를 참조하시기 바랍니다.

Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.

Model	ACR-Σ12 S	ACR-Σ12 PL	ACR-Σ12 PR	ACR-Σ12 PU				

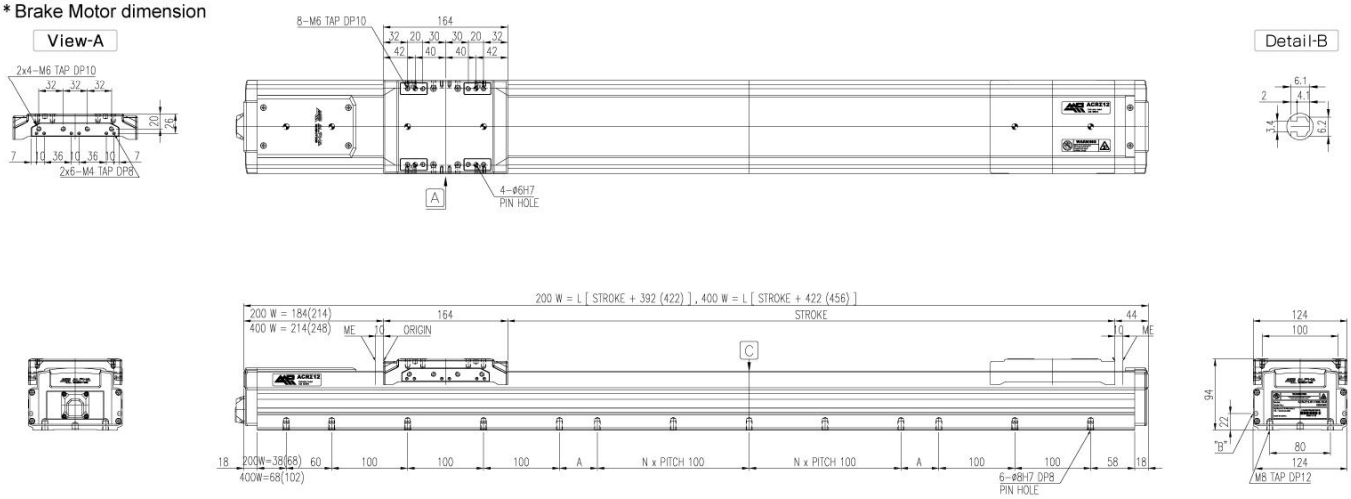
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-Σ12-S/PL-20N/40N	
ACR-Σ12-S-20N/40N			ACR-Σ12-PL-20N/40N	
Rated Output		W	200W, 3000 min⁻¹	400W, 3000 min⁻¹
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:50 (28) V:22 (10)	H:50 (45) V:38 (20)
Stroke Range		mm	100 ~ 1200	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

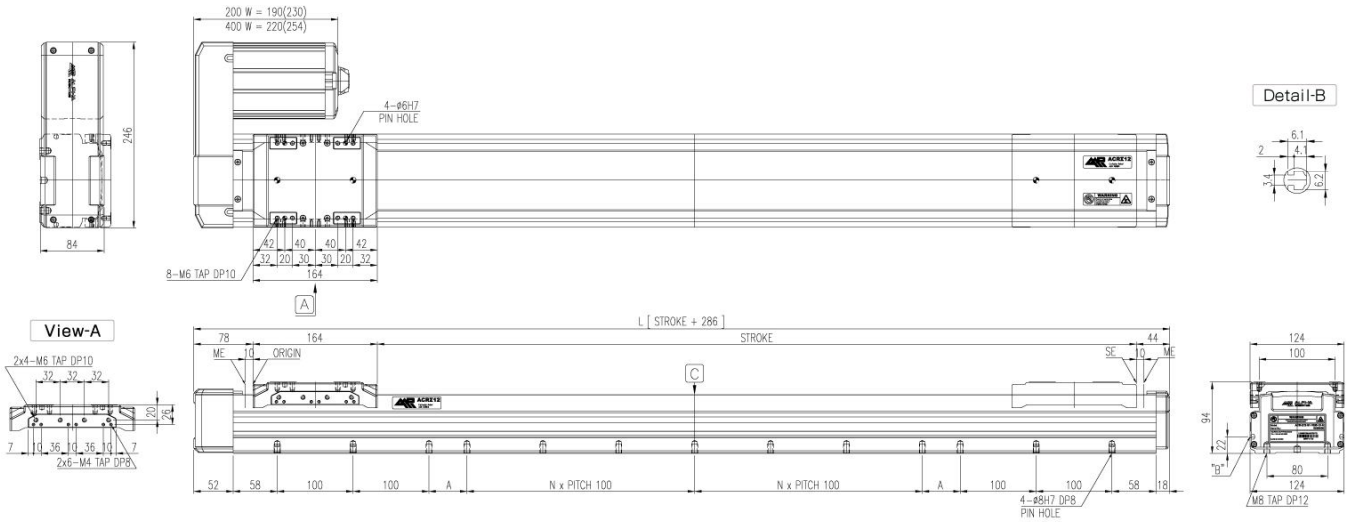
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Note3 Allowable Overhang Distance - mm: Horizontal Use		0°	500	475	350	273
		45°	500	500	408	320
		90°	500	500	500	500
Wall Installation Use		0°	500	460	336	263
		45°	481	316	231	179
		90°	500	500	376	295
Vertical Use		0°	500	490	370	295
		45°	500	319	241	191
		90°	500	490	370	295
Estimated Condition			Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-Σ12-S-20N/40N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ12-PL-20N/40N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ12-S-20N	kg	11.19	12.36	13.53	14.70	15.87	17.04	18.21	19.38	20.55	21.72	1.17
	ACR-Σ12-S-40N	kg	12.00	13.17	14.34	15.51	16.68	17.85	19.02	20.19	21.36	22.53	1.17

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ12-S-N	mm/s	500						474	375	304	251	Note4
	ACR-Σ12-S-H	mm/s	1000						948	750	608	503	Note4

⚠ CAUTION ※ 환글번역은 C10.1 Page를 참조하시기 바랍니다.

Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of 'A' change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.7age).

Model	ACR-Σ12 S	ACR-Σ12 PL	ACR-Σ12 PR	ACR-Σ12 PU				

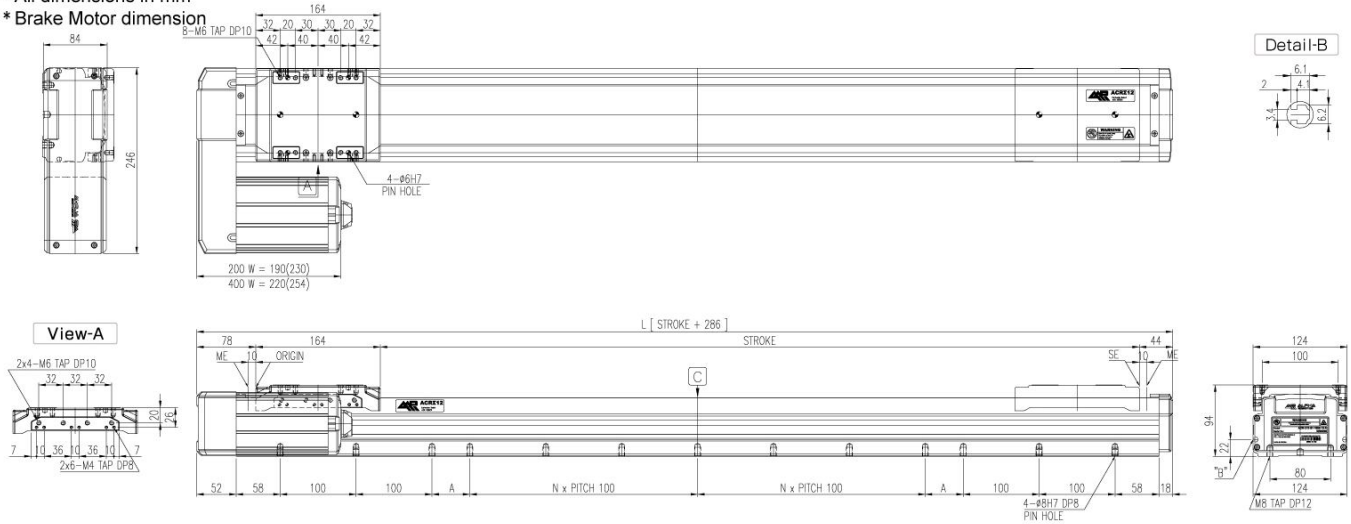
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification	Unit	ACR-Σ12-PR/PU-20N/40N	
ACR-Σ12-PR-20N/40N		ACR-Σ12-PU-20N/40N	
Rated Output	W	200W, 3000 min⁻¹	400W, 3000 min⁻¹
Max. Speed Note1	mm/s	500 (1000)	
Max. Load Note2	kg	H:50 (28) V:22 (10)	H:50 (45) V:38 (20)
Stroke Range	mm	100 ~ 1200	
Repeatability	mm	± 0.02	
Drive Type	-	BALL SCREW	

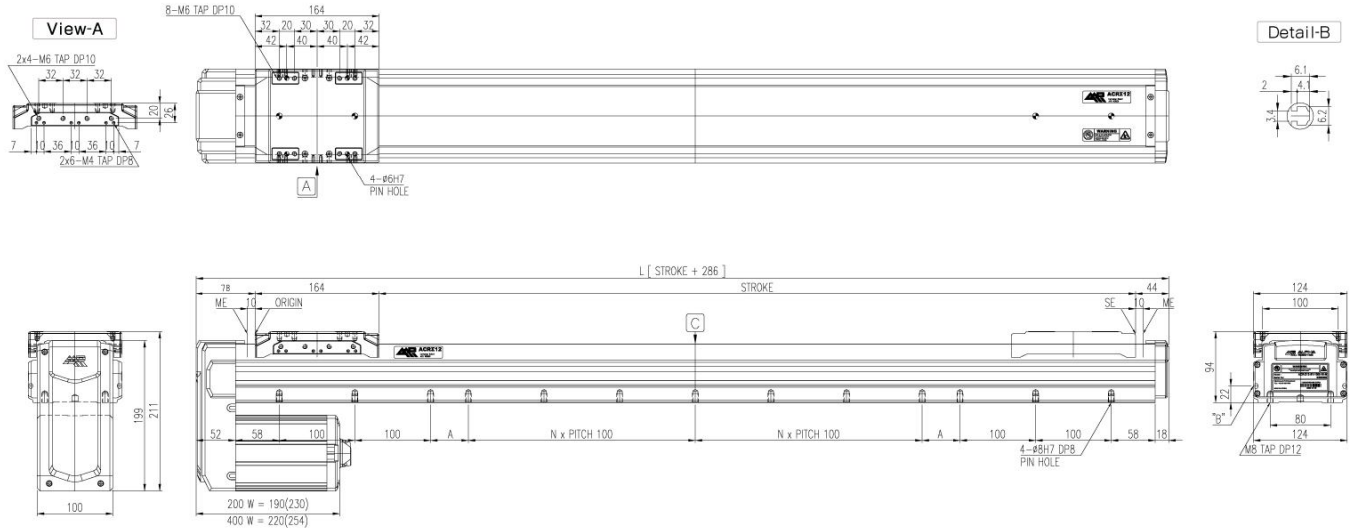
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Note3 Allowable Overhang Distance - mm	Horizontal Use	0°	500	475	350	273
		45°	500	500	408	320
		90°	500	500	500	500
	Wall Installation Use	0°	500	460	336	263
		45°	481	316	231	179
		90°	500	500	376	295
	Vertical Use	0°	500	490	370	295
		45°	500	319	241	191
		90°	500	490	370	295
	Estimated Condition	Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)		
		Life in traveled distance : 30000 km				

ACR-Σ12-PR-20N/40N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ12-PU-20N/40N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ12-PR/PU-20N	kg	9.51	10.68	11.85	13.02	14.19	15.36	16.53	17.70	18.87	20.04	1.17
	ACR-Σ12-PR/PU-40N	kg	9.97	11.14	12.31	13.48	14.65	15.82	16.99	18.16	19.33	20.50	1.17

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ12-PR/PU-N	mm/s	500						474	375	304	251	Note4
	ACR-Σ12-PR/PU-H	mm/s	1000						948	750	608	503	Note4

⚠ CAUTION ※ 한글번역은 C10.1 Page 를 참조하시기 바랍니다.

Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of 'A' change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.7page).

Model	ACR-Σ16 S	ACR-Σ16 PL	ACR-Σ16 PR	ACR-Σ16 PU				

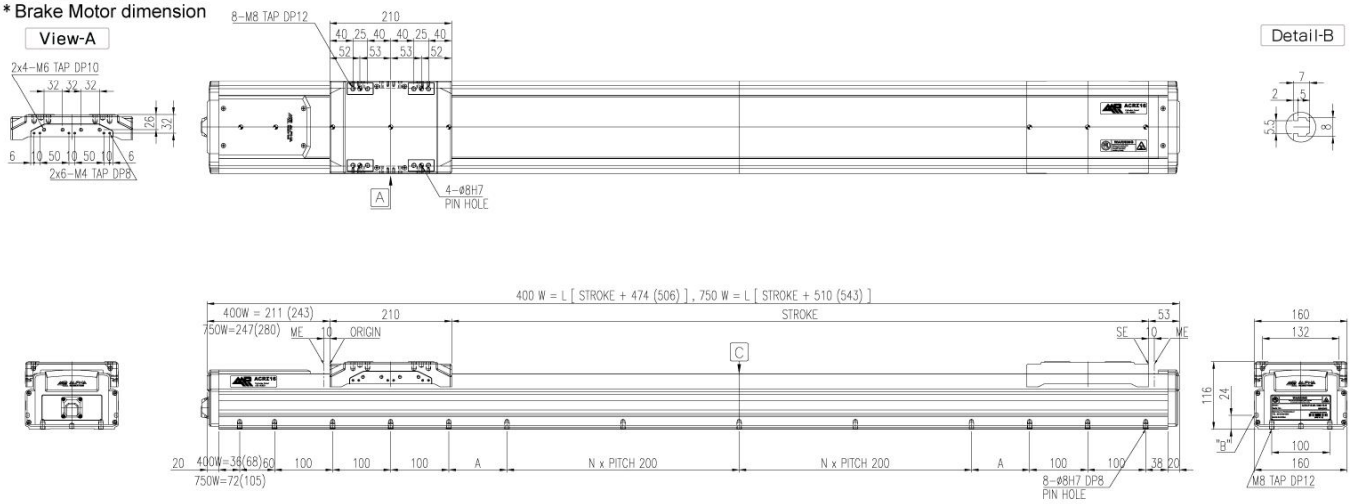
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-Σ16-S/PL-40N/75N	
ACR-Σ16-S-40N/75N			ACR-Σ16-PL-40N/75N	
Rated Output		W	400W, 3000 min⁻¹	750W, 3000 min⁻¹
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:80 (35) V:40 (20)	H:80 (70) V:45 (30)
Stroke Range		mm	100 ~ 1200 (1600)	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

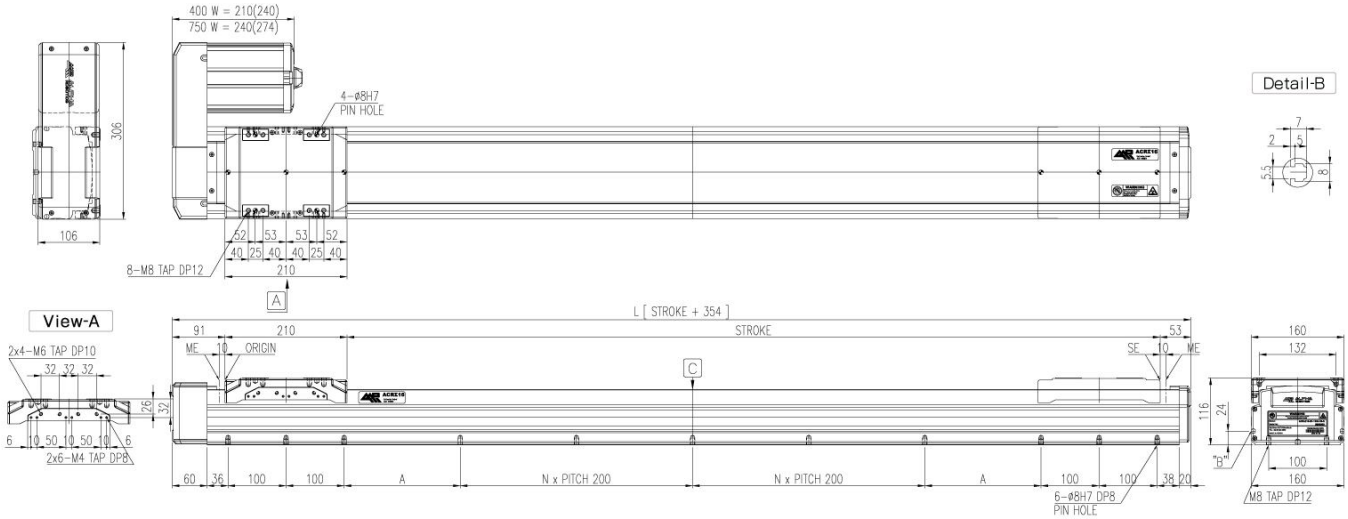
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Allowable Overhang Distance - mm	Horizontal Use	0°	600	600	410	298
		45°	600	600	486	353
		90°	600	600	600	600
	Wall Installation Use	0°	600	590	380	275
		45°	600	410	264	191
		90°	600	600	435	315
	Vertical Use	0°	600	600	420	315
		45°	600	403	273	205
		90°	600	600	420	310
Note3	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-Σ16-S-40N/75N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ16-PL-40N/75N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ16-S-40N	kg	19.35	21.20	23.05	24.90	26.75	28.60	30.45	32.30	34.15	36.00	1.85
	ACR-Σ16-S-75N	kg	21.45	23.30	25.15	27.00	28.85	30.70	32.55	34.40	36.25	38.10	1.85

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ16-S-N	mm/s	500						451	359	292	243	Note4
	ACR-Σ16-S-H	mm/s	1000						902	718	584	485	Note4

⚠ CAUTION ※ 한글번역은 C10.1 Page 를 참조하시기 바랍니다.

Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification (30.7page). The speed on the table is for diameter 15 of Ball Screw and please refer the Specification(30.7page) for diameter 20 of Ball Screw.

Model	ACR-Σ16 S	ACR-Σ16 PL	ACR-Σ16 PR	ACR-Σ16 PU				

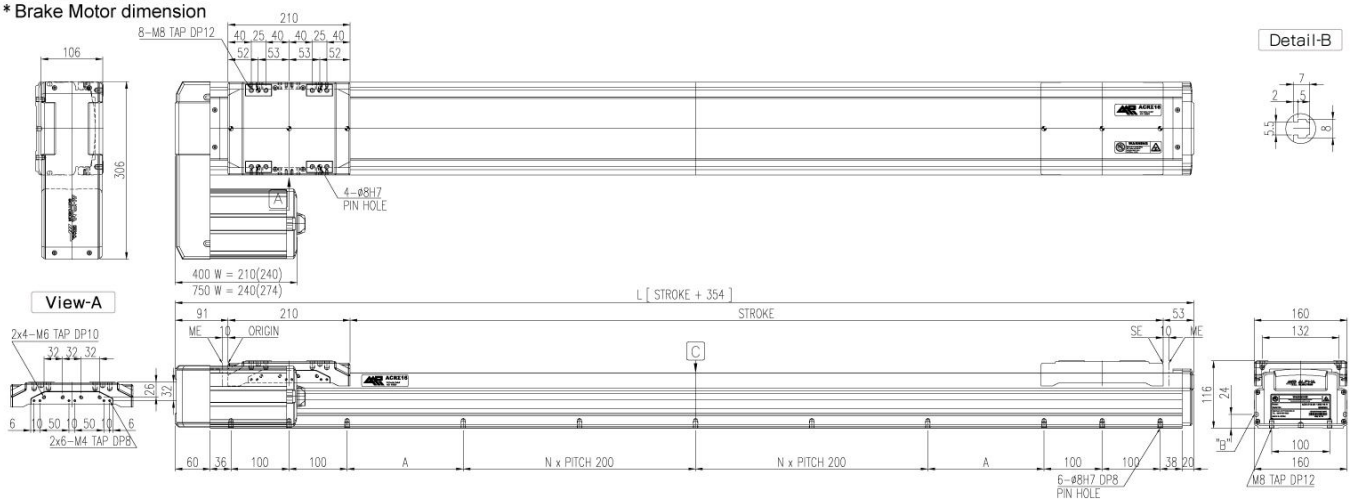
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification	Unit	ACR-Σ16-PR/PU-40N/75N	
ACR-Σ16-PR-40N/75N		ACR-Σ16-PU-40N/75N	
Rated Output	W	400W, 3000 min⁻¹	750W, 3000 min⁻¹
Max. Speed Note1	mm/s	500 (1000)	
Max. Load Note2	kg	H:80 (35) V:40 (20)	H:80 (70) V:45 (30)
Stroke Range	mm	100 ~ 1200 (1600)	
Repeatability	mm	± 0.02	
Drive Type	-	BALL SCREW	

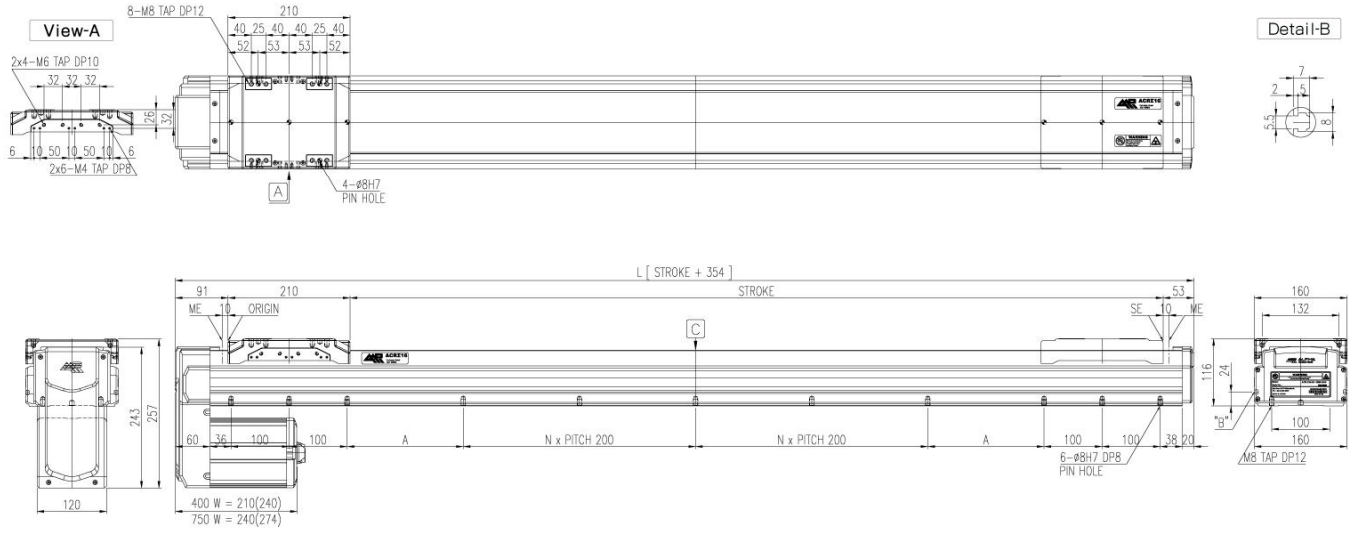
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Note3 Allowable Overhang Distance - mm	Horizontal Use	0°	600	600	410	298
		45°	600	600	486	353
		90°	600	600	600	600
	Wall Installation Use	0°	600	590	380	275
		45°	600	410	264	191
		90°	600	600	435	315
	Vertical Use	0°	600	600	420	315
		45°	600	403	273	205
		90°	600	600	420	310
	Estimated Condition	Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)		
		Life in traveled distance : 30000 km				

ACR-Σ16-PR-40N/75N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ16-PU-40N/75N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ16-PR/PU-40N	kg	15.23	17.08	18.93	20.78	22.63	24.48	26.33	28.18	30.03	31.88	1.85
	ACR-Σ16-PR/PU-75N	kg	18.58	20.43	22.28	24.13	25.98	27.83	29.68	31.53	33.38	35.23	1.85

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ16-PR/PU-N	mm/s	500						451	359	292	243	Note4
	ACR-Σ16-PR/PU-H	mm/s	1000						902	718	584	485	Note4

⚠ CAUTION ※ 한글번역은 C10.1 Page를 참조하시기 바랍니다.

Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification (30.7page). The speed on the table is for diameter 15 of Ball Screw and please refer the Specification(30.7page) for diameter 20 of Ball Screw.

Model	ACR-Σ20 S	ACR-Σ20 PL	ACR-Σ20 PR	ACR-Σ20 PU				

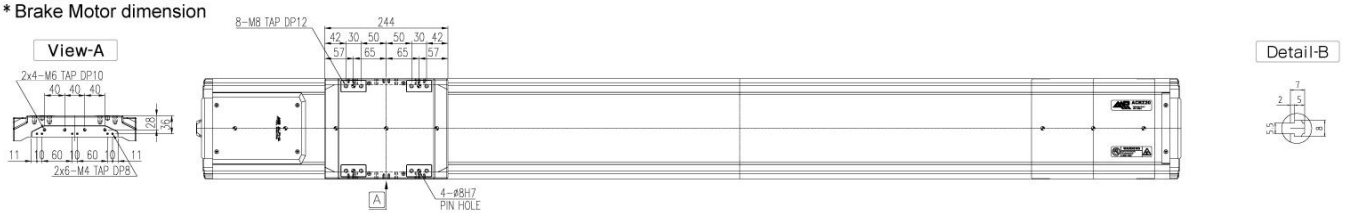
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

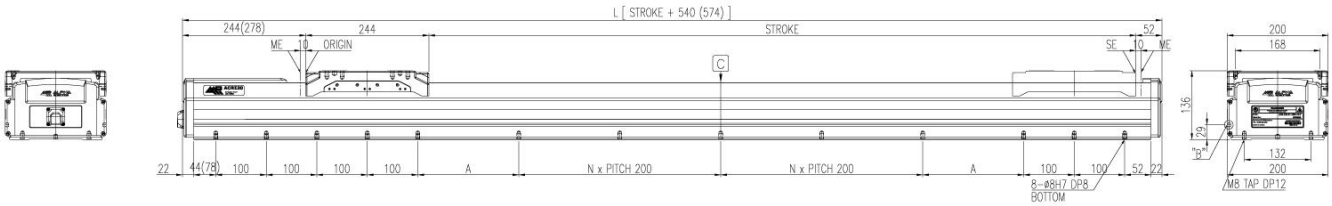
Specification		Unit	ACR-Σ20-S/PL-75N	
ACR-Σ20-S-75N			ACR-Σ20-PL-75N	
Rated Output		W	750W, 3000 min⁻¹	
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:120 (100)	V:60 (38)
Stroke Range		mm	200 ~ 2000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	30	60	90	120
Allowable Overhang Distance - mm	Horizontal Use	0°	700	700	605	440
		45°	700	700	700	522
		90°	700	700	700	700
	Wall Installation Use	0°	700	700	478	346
		45°	700	553	358	257
		90°	700	700	640	465
	Vertical Use	0°	700	700	525	395
		45°	700	514	345	260
		90°	700	700	520	390
Note3	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

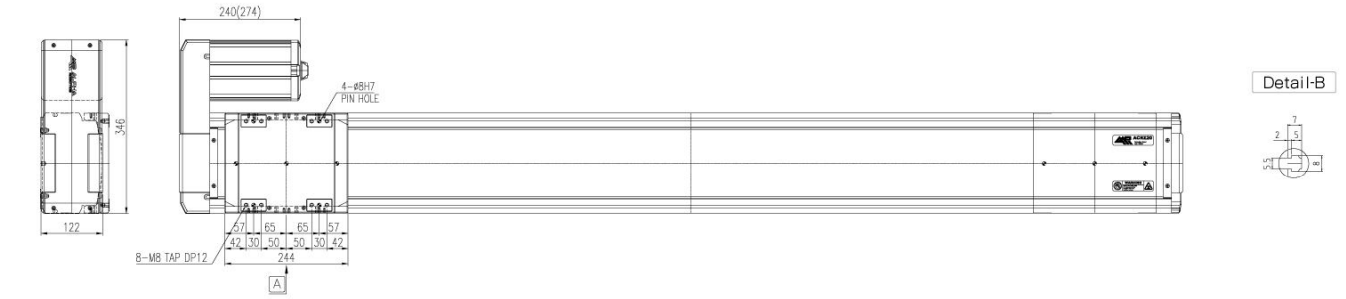
ACR-Σ20-S-75N

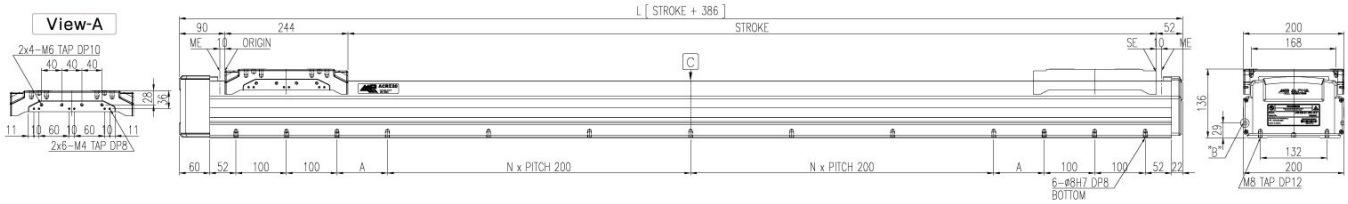
* All dimensions in mm
* Brake Motor dimension





ACR-Σ20-PL-75N





	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-Σ20-S-75N	kg	31.70	34.53	37.36	40.19	43.02	45.85	48.68	51.51	54.34	57.17	2.83
Speed	ACR-Σ20-S-N	mm/s	500							478	391	325	Note4
	ACR-Σ20-S-H	mm/s	1000							957	782	651	Note4

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Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification (30.7page). The speed on the table is for diameter 20 of Ball Screw and please refer the Specification(30.7page) for diameter 25 of Ball Screw.

Model	ACR-Σ20 S	ACR-Σ20 PL	ACR-Σ20 PR	ACR-Σ20 PU				

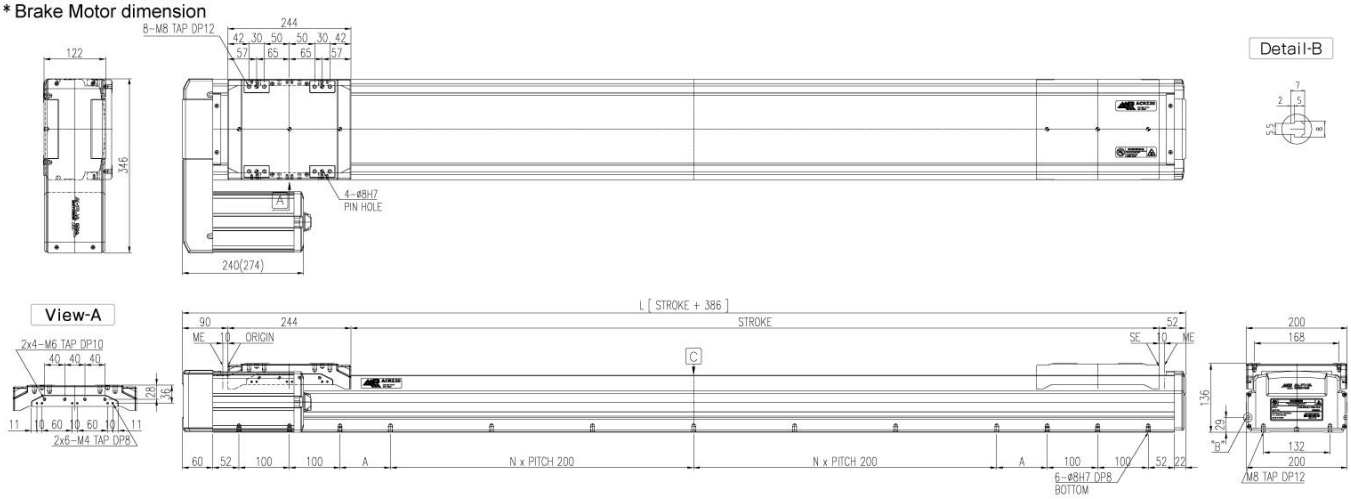
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-Σ20-PR/PU-75N	
ACR-Σ20-PR-75N			ACR-Σ20-PU-75N	
Rated Output		W	750W, 3000 min⁻¹	
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:120 (90)	V:60 (38)
Stroke Range		mm	200 ~ 2000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

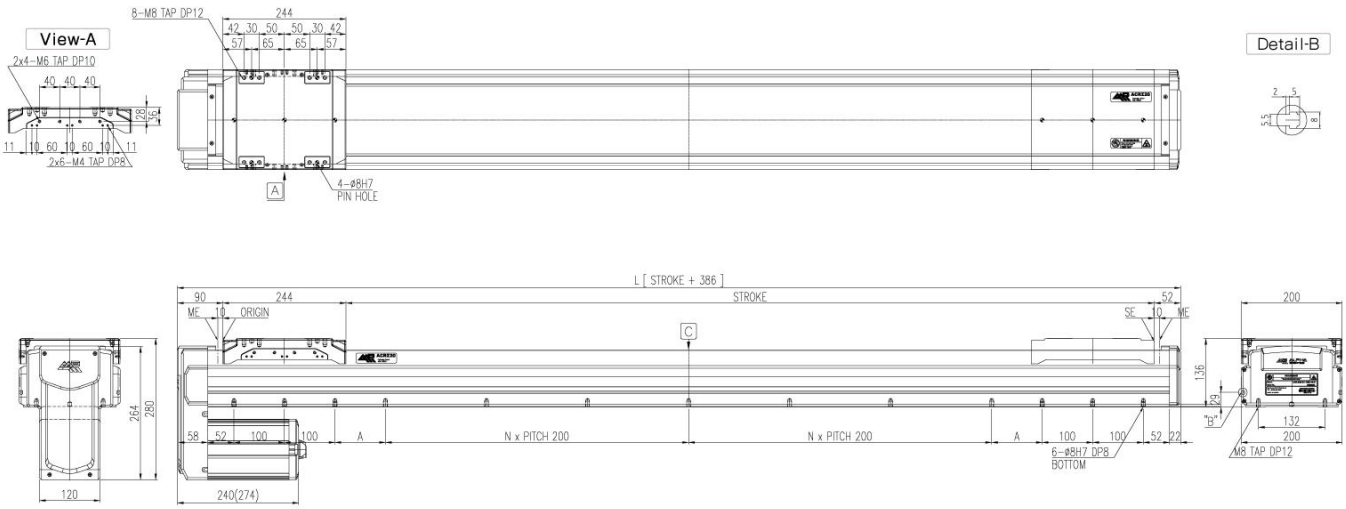
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	30	60	90	120
Note3 Allowable Overhang Distance - mm	Horizontal Use	0°	700	700	605	440
		45°	700	700	700	522
		90°	700	700	700	700
	Wall Installation Use	0°	700	700	478	346
		45°	700	553	358	257
		90°	700	700	640	465
	Vertical Use	0°	700	700	525	395
		45°	700	514	345	260
		90°	700	700	520	390
	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-Σ20-PR-75N

* All dimensions in mm
* Brake Motor dimension



ACR-Σ20-PU-75N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ20-PR/PU-75N	kg	24.58	27.41	30.24	33.07	35.90	38.73	41.56	44.39	47.22	50.05	2.83

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-Σ20-PR/PU-N	mm/s	500							478	391	325	Note4
	ACR-Σ20-PR/PU-H	mm/s	1000							957	782	651	Note4

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Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
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NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification (30.7page). The speed on the table is for diameter 20 of Ball Screw and please refer the Specification(30.7page) for diameter 25 of Ball Screw.

Model	ACR-ΣV9 S	ACR-ΣV9 PL	ACR-ΣV9 PR	ACR-ΣV9 PU				

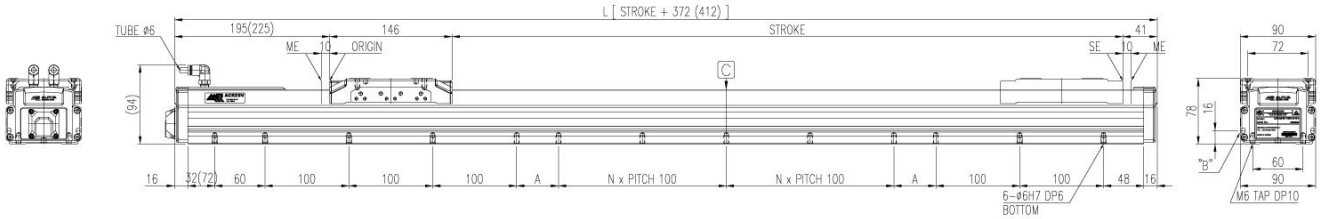
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification	Unit	ACR-ΣV9-S/PL-10N/20N	
ACR-ΣV9-S-10N		ACR-ΣV9-PL-10N/20N	
Rated Output	W	100W, 3000 min⁻¹	200W, 3000 min⁻¹
Max. Speed Note1	mm/s	500 (1000)	
Max. Load Note2	kg	H:22 (4), V:10 (4)	H:30 (28), V:16 (8)
Stroke Range	mm	100 ~ 1000	
Repeatability	mm	± 0.02	
Drive Type	-	BALL SCREW	

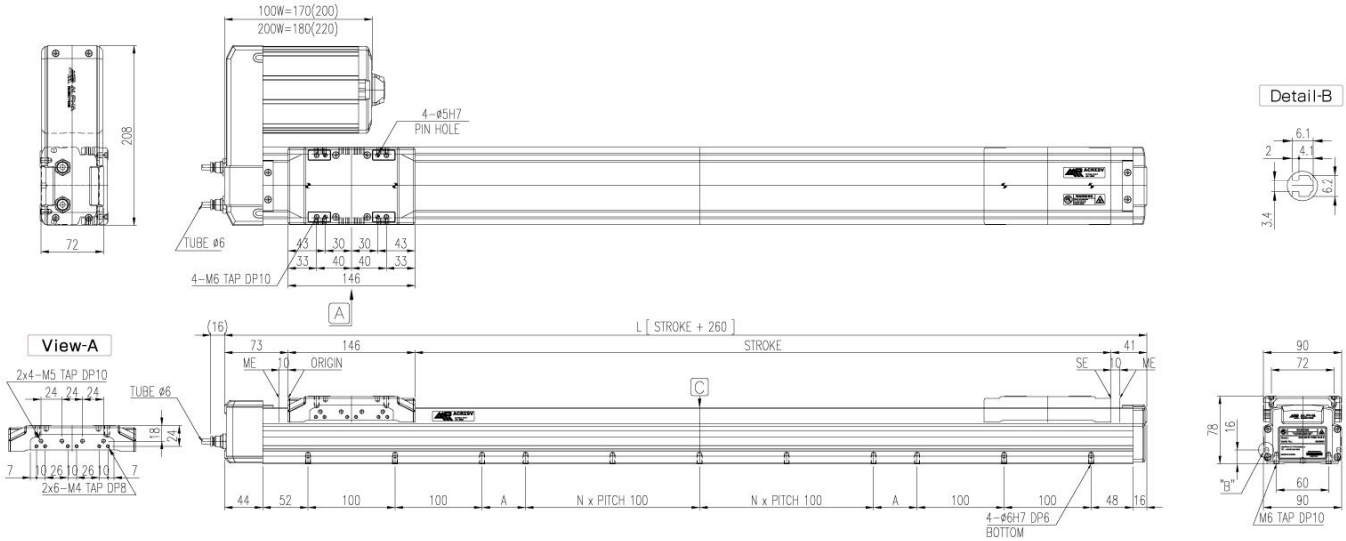
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	5	10	20	30
Note3 Allowable Overhang Distance - mm: Horizontal Use		0°	350	260	121	74
		45°	350	242	114	70
		90°	350	350	350	350
Wall Installation Use		0°	350	350	350	350
		45°	350	240	112	70
		90°	350	268	125	77
Vertical Use		0°	350	245	123	82
		45°	260	130	65	44
		90°	350	243	122	81
Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)		
		Life in traveled distance : 30000 km				

ACR-ΣV9-S-10N

* All dimensions in mm
* Brake Motor dimension



ACR-ΣV9-PL-10N/20N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV9-S-10N	kg	7.05	7.88	8.71	9.54	10.37	11.20	12.03	12.86	13.69	14.52	0.83

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV9-S-N	mm/s	500						492	388	313	258	Note4
	ACR-ΣV9-S-H	mm/s	1000						984	775	627	517	Note4

⚠ CAUTION ※ 한글번역은 C10.1 Page 를 참조하시기 바랍니다.

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Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9age).

Model	ACR-ΣV9 S	ACR-ΣV9 PL	ACR-ΣV9 PR	ACR-ΣV9 PU				

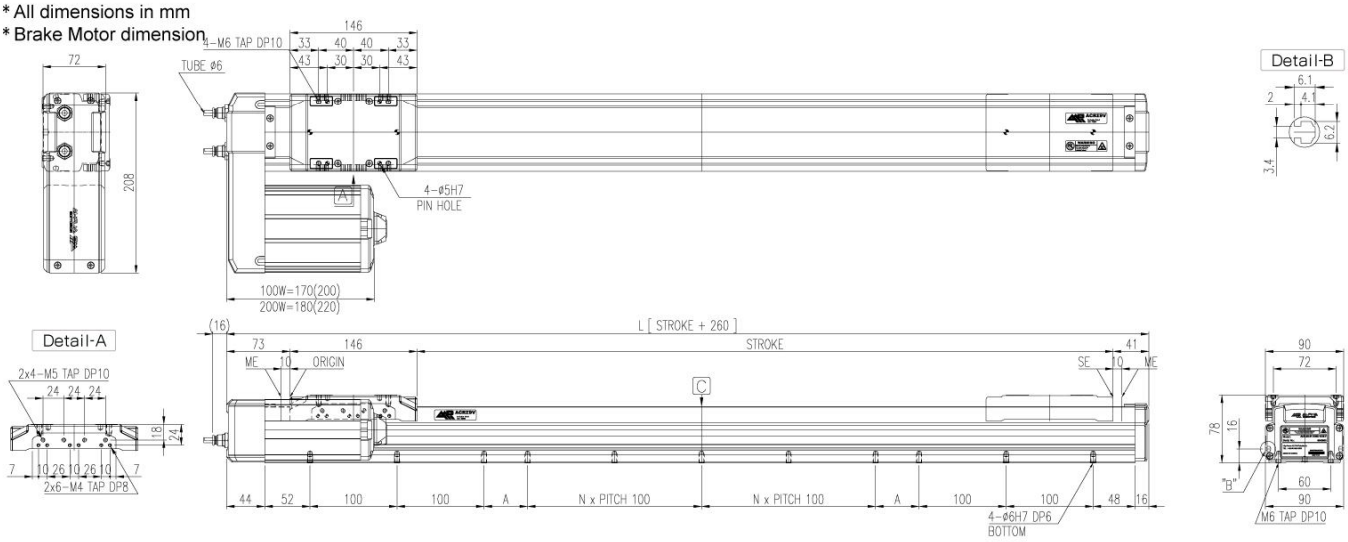
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-ΣV9-PR/PU-10N/20N	
ACR-ΣV9-PR-10N/20N			ACR-ΣV9-PU-10N/20N	
Rated Output		W	100W, 3000 min⁻¹	200W, 3000 min⁻¹
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:12 (2) V:8 (2)	H:30 (28) V:16 (8)
Stroke Range		mm	100 ~ 1000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

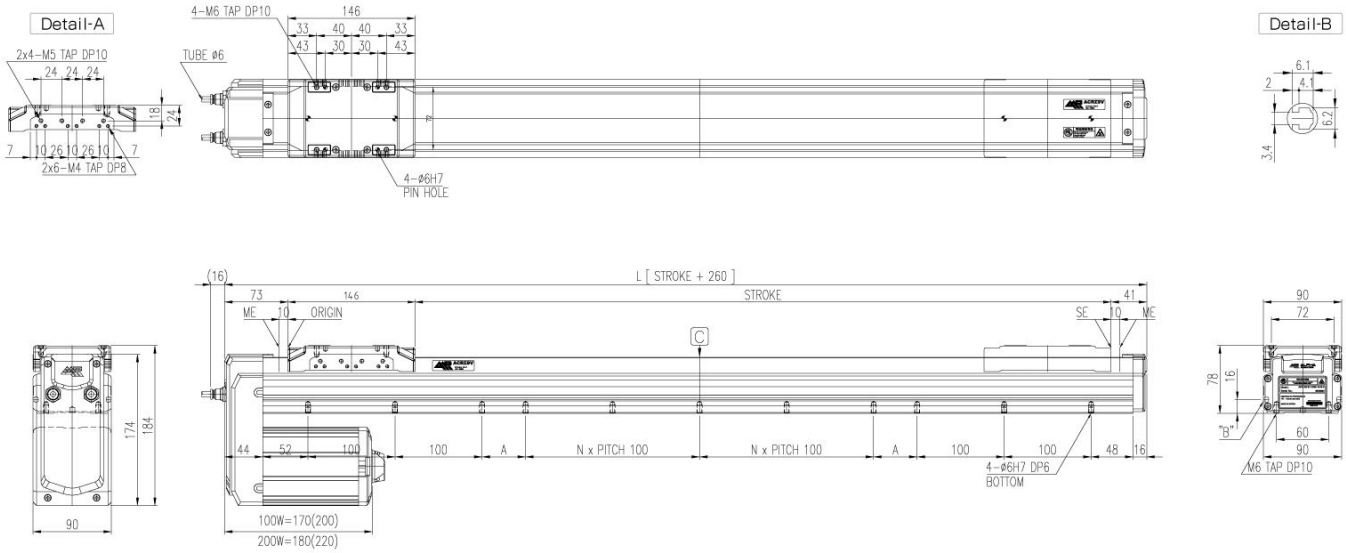
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	5	10	20	30
Allowable Overhang Distance - mm (Note3)	Horizontal Use	0°	350	260	121	74
		45°	350	242	114	70
		90°	350	350	350	350
	Wall Installation Use	0°	350	350	350	350
		45°	350	240	112	70
		90°	350	268	125	77
	Vertical Use	0°	350	245	123	82
		45°	260	130	65	44
		90°	350	243	122	81
	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-ΣV9-PR-10N/20N

* All dimensions in mm
* Brake Motor dimension



ACR-ΣV9-PU-10N/20N



	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-ΣV9-PR/PU-10N	kg	6.29	7.12	7.95	8.78	9.61	10.44	11.27	12.10	12.93	13.76	0.83
	ACR-ΣV9-PR/PU-20N	kg	6.75	7.58	8.41	9.24	10.07	10.90	11.73	12.56	13.39	14.22	0.83
Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV9-PR/PU-N	mm/s	500						492	388	313	258	Note4
	ACR-ΣV9-PR/PU-H	mm/s	1000						984	775	627	517	Note4

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Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9age).

Model	ACR-ΣV12 S	ACR-ΣV12 PL	ACR-ΣV9 PR	ACR-ΣV12 PU				

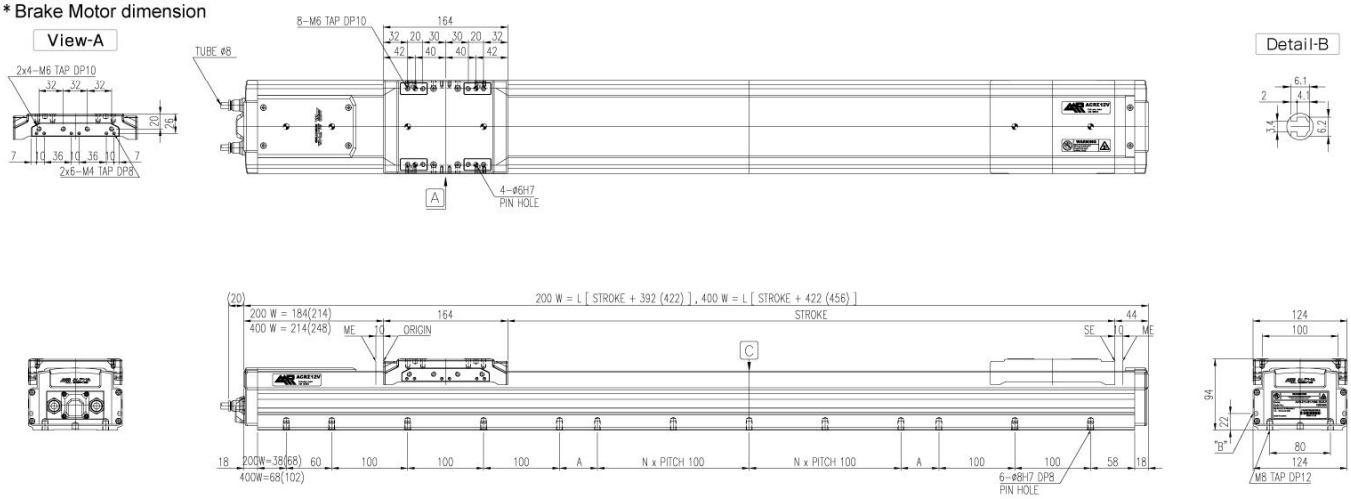
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-ΣV12-S/PL-20N/40N	
ACR-ΣV12-S-20N/40N			ACR-ΣV12-PL-20N/40N	
Rated Output		W	200W, 3000 min⁻¹	400W, 3000 min⁻¹
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:50 (28) V:22 (10)	H:50 (45) V:38 (20)
Stroke Range		mm	100 ~ 1200	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

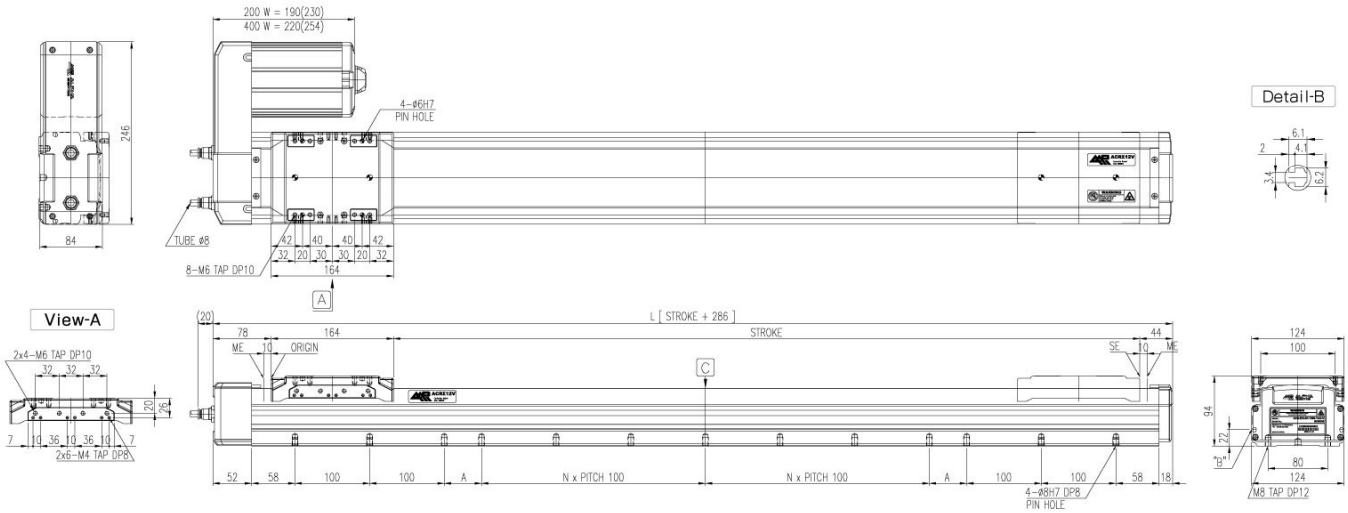
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Allowable Overhang Distance - mm (Note3)	Horizontal Use	0°	500	475	350	273
		45°	500	500	408	320
		90°	500	500	500	500
	Wall Installation Use	0°	500	460	336	263
		45°	481	316	231	179
		90°	500	500	376	295
	Vertical Use	0°	500	490	370	295
		45°	500	319	241	191
		90°	500	490	370	295
	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-ΣV12-S-20N/40N

* All dimensions in mm
* Brake Motor dimension



ACR-ΣV12-PL-20N/40N



Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV12-S-20N	kg	11.19	12.36	13.53	14.70	15.87	17.04	18.21	19.38	20.55	21.72	1.17
	ACR-ΣV12-S-40N	kg	12.00	13.17	14.34	15.51	16.68	17.85	19.02	20.19	21.36	22.53	1.17

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV12-S-N	mm/s	500						474	375	304	251	Note4
	ACR-ΣV12-S-H	mm/s	1000						948	750	608	503	Note4

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Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of 'A' change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9age).

Model	ACR-ΣV12 S	ACR-ΣV12 PL	ACR-ΣV12 PR	ACR-ΣV12 PU				

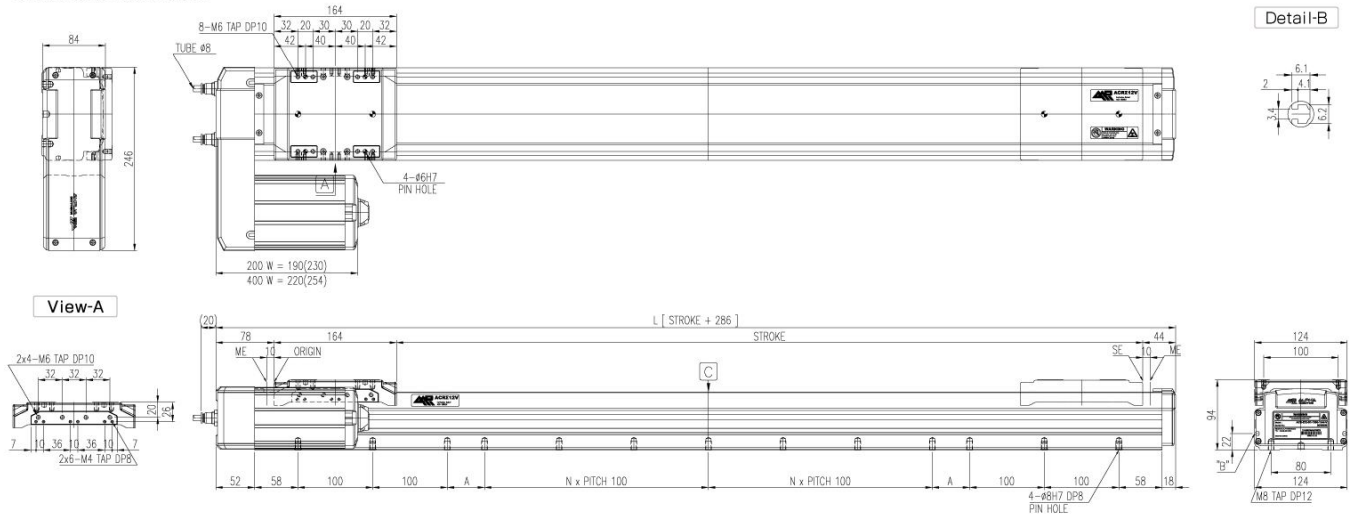
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification	Unit	ACR-ΣV12-PR/PU-20N/40N	
ACR-ΣV12-PR-20N/40N		ACR-ΣV12-PU-20N/40N	
Rated Output	W	200W, 3000 min⁻¹	400W, 3000 min⁻¹
Max. Speed Note1	mm/s	500 (1000)	
Max. Load Note2	kg	H:50 (28) V:22 (10)	H:50 (45) V:38 (20)
Stroke Range	mm	100 ~ 1200	
Repeatability	mm	± 0.02	
Drive Type	-	BALL SCREW	

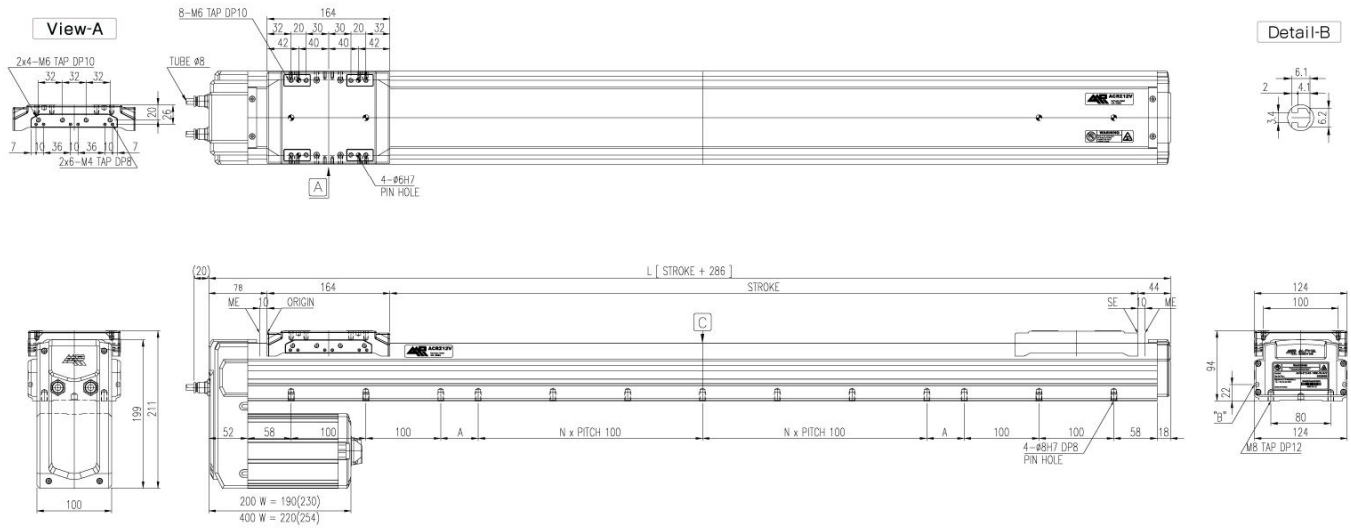
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Note3 Allowable Overhang Distance - mm	Horizontal Use	0°	500	475	350	273
		45°	500	500	408	320
		90°	500	500	500	500
	Wall Installation Use	0°	500	460	336	263
		45°	481	316	231	179
		90°	500	500	376	295
	Vertical Use	0°	500	490	370	295
		45°	500	319	241	191
		90°	500	490	370	295
	Estimated Condition	Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)		
		Life in traveled distance : 30000 km				

ACR-ΣV12-PR-20N/40N

* All dimensions in mm
* Brake Motor dimension



ACR-ΣV12-PU-20N/40N



	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-ΣV12-PR/PU-20N	kg	9.51	10.68	11.85	13.02	14.19	15.36	16.53	17.70	18.87	20.04	1.17
	ACR-ΣV12-PR/PU-40N	kg	9.97	11.14	12.31	13.48	14.65	15.82	16.99	18.16	19.33	20.50	1.17
Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV12-PR/PU-N	mm/s	500						474	375	304	251	Note4
	ACR-ΣV12-PR/PU-H	mm/s	1000						948	750	608	503	Note4

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Standard stroke changes by 50mm distance, and values of 'A' change by 25, 50, 75, 100

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9page).

Model	ACR-ΣV16 S	ACR-ΣV16 PL	ACR-ΣV16 PR	ACR-ΣV16 PU				

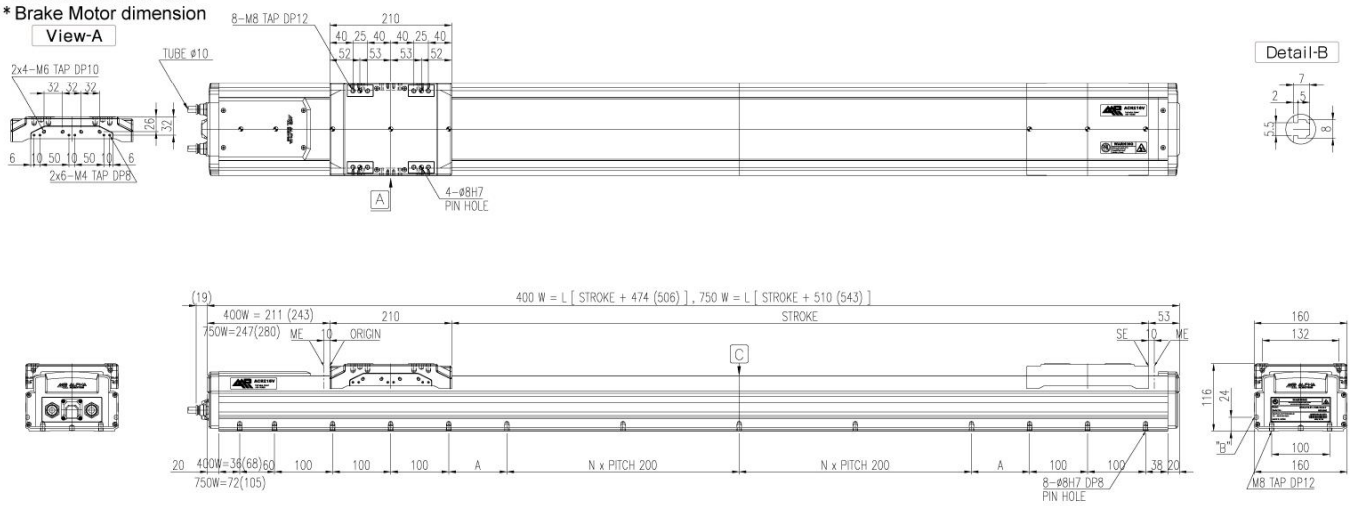
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-Σ16-S/PL-40N/75N-V	
ACR-ΣV16-S-40N/75N			ACR-ΣV16-PL-40N/75N	
Rated Output		W	400W, 3000 min^{-1}	750W, 3000 min^{-1}
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:80 (35) V:40 (20)	H:80 (70) V:45 (30)
Stroke Range		mm	100 ~ 1200 (1600)	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

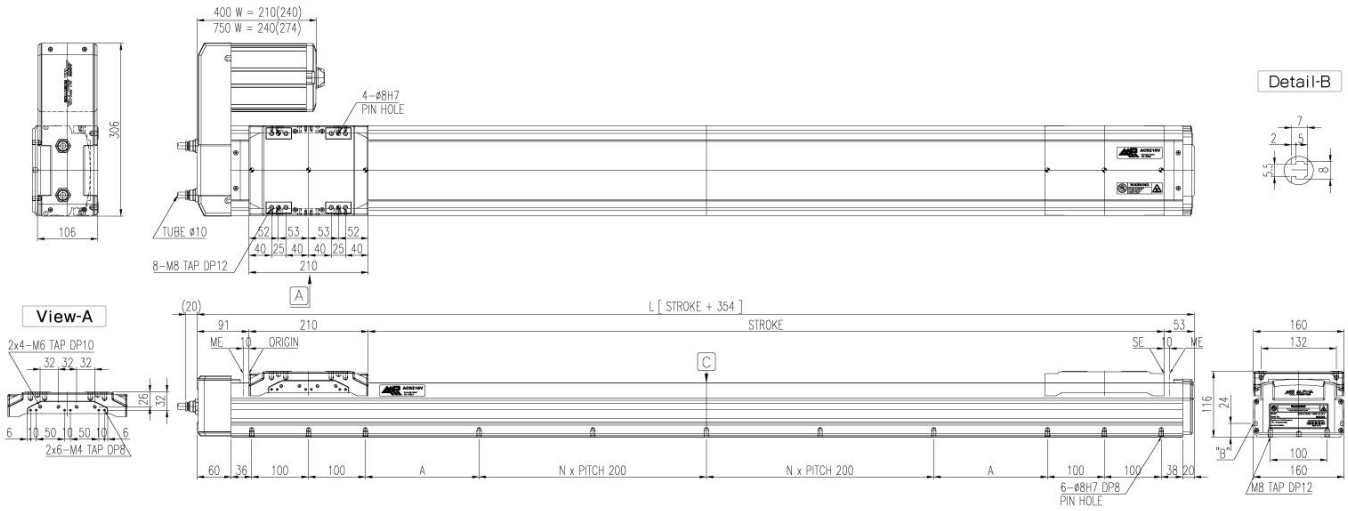
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Allowable Overhang Distance - mm	Horizontal Use	0°	600	600	410	298
		45°	600	600	486	353
		90°	600	600	600	600
	Wall Installation Use	0°	600	590	380	275
		45°	600	410	264	191
		90°	600	600	435	315
	Vertical Use	0°	600	600	420	315
		45°	600	403	273	205
		90°	600	600	420	310
Note3	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-ΣV16-S-40N/75N

* All dimensions in mm
* Brake Motor dimension



ACR-ΣV16-PL-40N/75N



	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-ΣV16-S-40N	kg	19.35	21.20	23.05	24.90	26.75	28.60	30.45	32.30	34.15	36.00	1.85
	ACR-ΣV16-S-75N	kg	21.45	23.30	25.15	27.00	28.85	30.70	32.55	34.40	36.25	38.10	1.85
Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV16-S-N	mm/s	500						451	359	292	243	Note4
	ACR-ΣV16-S-H	mm/s	1000						902	718	584	485	Note4

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Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification (30.9page). The speed on the table is for diameter 15 of Ball Screw and please refer the Specification(30.9page) for diameter 20 of Ball Screw.

Model	ACR-ΣV16 S	ACR-ΣV16 PL	ACR-ΣV16 PR	ACR-ΣV16 PU				

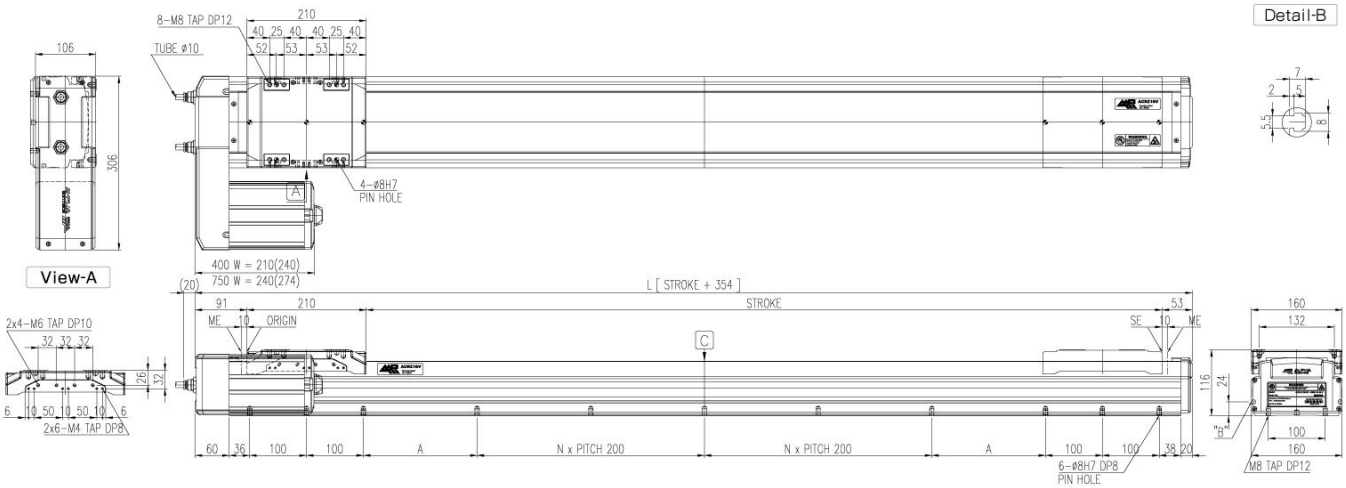
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification	Unit	ACR-ΣV16-PR/PU-40N/75N	
ACR-ΣV16-PR-40N/75N		ACR-ΣV16-PU-40N/75N	
Rated Output	W	400W, 3000 min⁻¹	750W, 3000 min⁻¹
Max. Speed Note1	mm/s	500 (1000)	
Max. Load Note2	kg	H:80 (35) V:40 (20)	H:80 (70) V:45 (30)
Stroke Range	mm	100 ~ 1200 (1600)	
Repeatability	mm	± 0.02	
Drive Type	-	BALL SCREW	

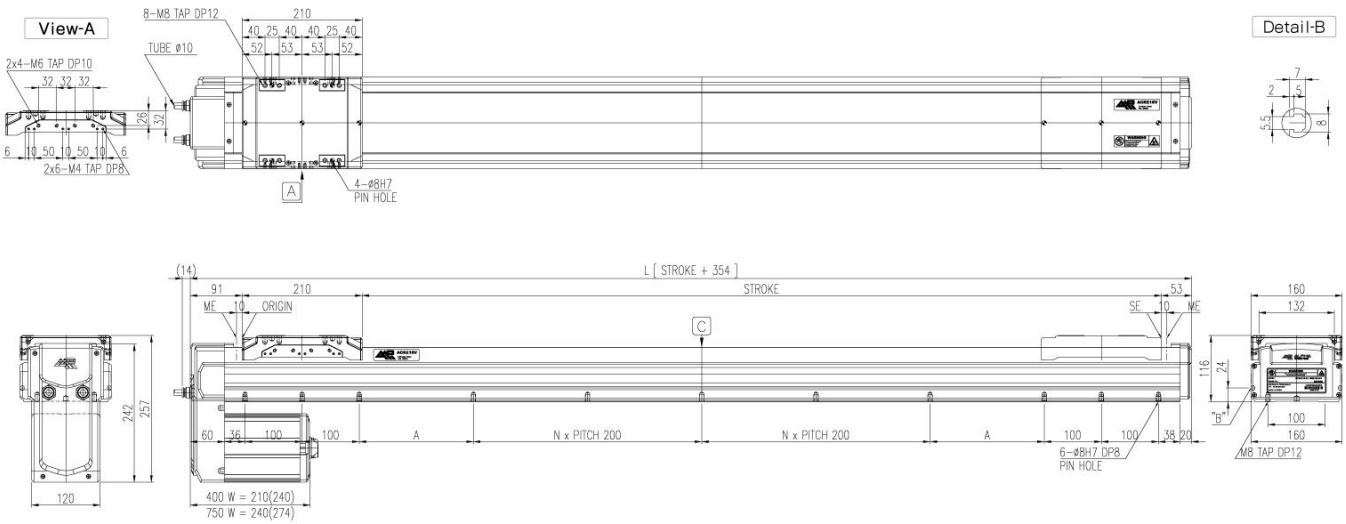
Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	20	30	40	50
Note3 Allowable Overhang Distance - mm	Horizontal Use	0°	600	600	410	298
		45°	600	600	486	353
		90°	600	600	600	600
	Wall Installation Use	0°	600	590	380	275
		45°	600	410	264	191
		90°	600	600	435	315
	Vertical Use	0°	600	600	420	315
		45°	600	403	273	205
		90°	600	600	420	310
	Estimated Condition	Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)		
		Life in traveled distance : 30000 km				

ACR-ΣV16-PR-40N/75N

* All dimensions in mm
* Brake Motor dimension



ACR-ΣV16-PU-40N/75N



	Model / Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-ΣV16-PR/PU-40N	kg	15.23	17.08	18.93	20.78	22.63	24.48	26.33	28.18	30.03	31.88	1.85
	ACR-ΣV16-PR/PU-75N	kg	18.58	20.43	22.28	24.13	25.98	27.83	29.68	31.53	33.38	35.23	1.85
Speed	Model / Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV16-PR/PU-N	mm/s	500						451	359	292	243	Note4
	ACR-ΣV16-PR/PU-H	mm/s	1000						902	718	584	485	Note4

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Please be careful of surrounding interference when it is returning to origin because the slide moves to ME. ·ME : Mechanical End ·SE : Stroke End
Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9page). The speed on the table is for diameter 15 of Ball Screw and please refer the Specification(30.9page) for diameter 20 of Ball Screw.

Model	ACR-ΣV20 S	ACR-ΣV20 PL	ACR-ΣV20 PR	ACR-ΣV20 PU				

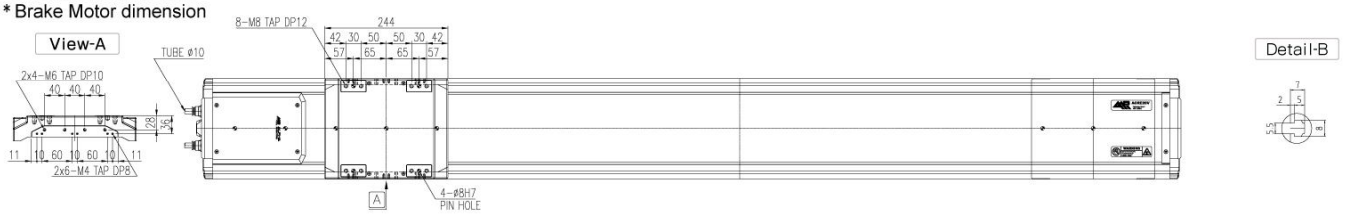
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

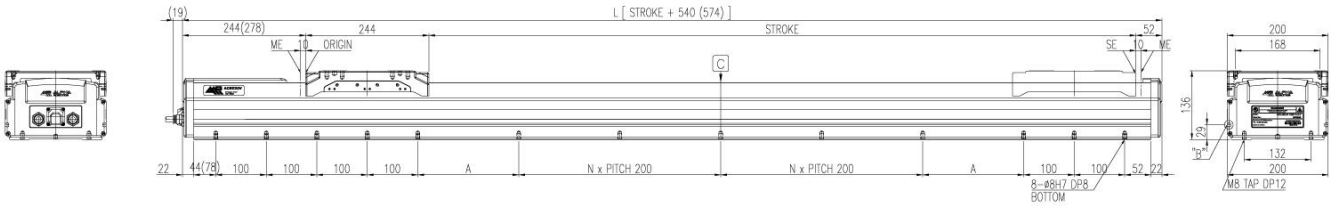
Specification		Unit	ACR-ΣV20-S/PL-75N	
ACR-ΣV20-S-75N			ACR-ΣV20-PL-75N	
Rated Output		W	750W, 3000 min⁻¹	
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:120 (100)	V:60 (38)
Stroke Range		mm	200 ~ 2000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

Specification			Unit	Data			
Acceleration			G	0.3			
Load			kg	30	60	90	120
Allowable Overhang Distance - mm	Horizontal Use		0°	700	700	605	440
			45°	700	700	700	522
			90°	700	700	700	700
	Wall Installation Use		0°	700	700	478	346
			45°	700	553	358	257
			90°	700	700	640	465
	Vertical Use		0°	700	700	525	395
			45°	700	514	345	260
			90°	700	700	520	390
Note3	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)		
			Life in traveled distance : 30000 km				

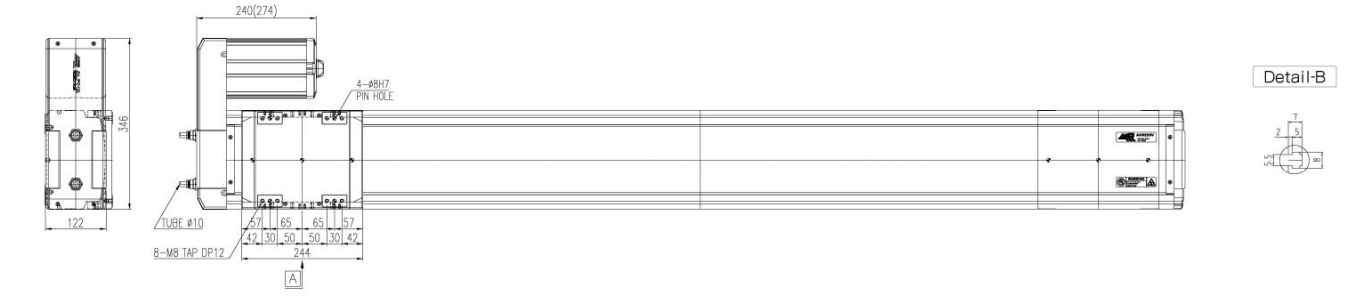
ACR-ΣV20-S-75N

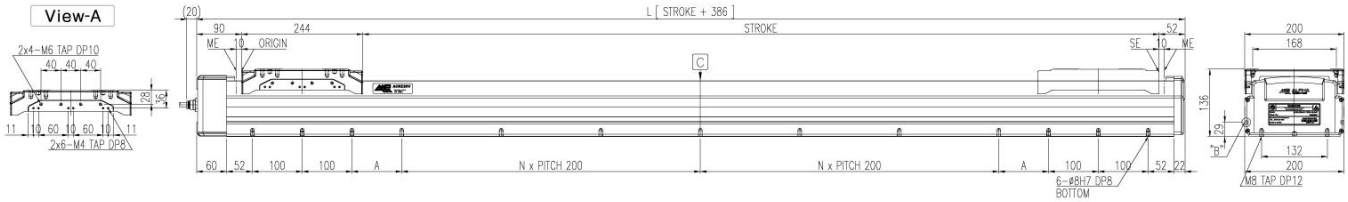
* All dimensions in mm
* Brake Motor dimension





ACR-ΣV20-PL-75N





	Model / Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
Weight	ACR-ΣV20-S-75N	kg	31.70	34.53	37.36	40.19	43.02	45.85	48.68	51.51	54.34	57.17	2.83
Speed	ACR-ΣV20-S-N	mm/s	500							478	391	325	Note4
	ACR-ΣV20-S-H	mm/s	1000							957	782	651	Note4

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Standard stroke changes by 50mm distance, and values of "A" change by 25, 50, 75, 100, 125, 150, 175, 200

NOTE1 In case of the short stroke, it may not be reached at maximum speed.
NOTE2 It is changed by operating conditions.
NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9page). The speed on the table is for diameter 20 of Ball Screw and please refer the Specification(30.9page) for diameter 25 of Ball Screw.

Model	ACR-ΣV20 S	ACR-ΣV20 PL	ACR-ΣV20 PR	ACR-ΣV20 PU				

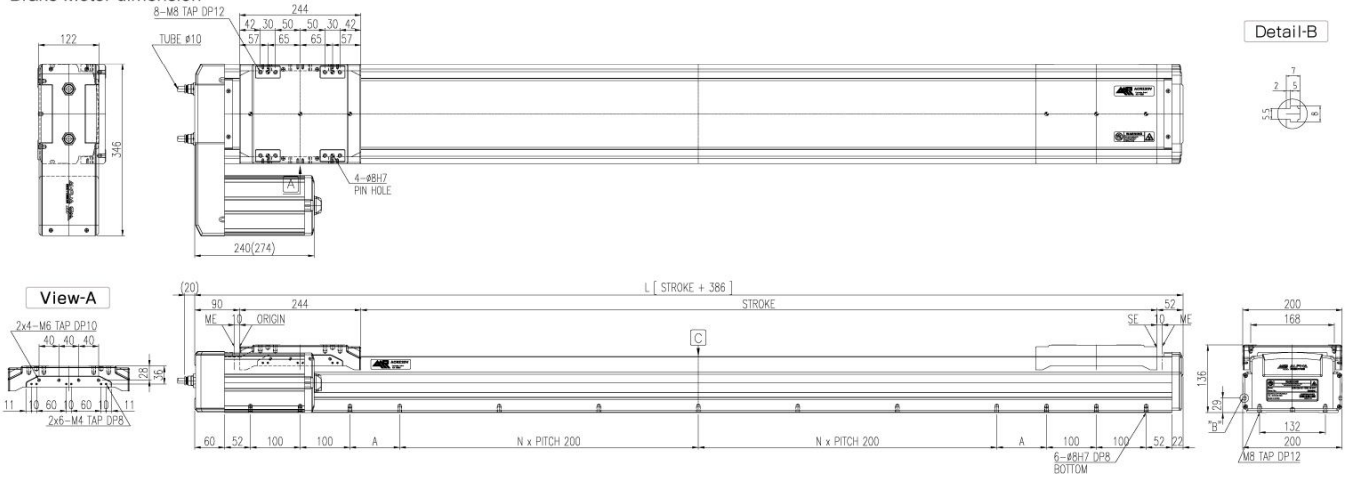
Values of ( ) is in case of speed of 1000mm/sec. / H of Max. Load indicares Horizontal use and V of Max.Load indicates Vertical use.

Specification		Unit	ACR-ΣV20-PR/PU-75N	
ACR-ΣV20-PR-75N			ACR-ΣV20-PU-75N	
Rated Output		W	750W, 3000 min⁻¹	
Max. Speed	Note1	mm/s	500 (1000)	
Max. Load	Note2	kg	H:120 (90)	V:60 (38)
Stroke Range		mm	200 ~ 2000	
Repeatability		mm	± 0.02	
Drive Type		-	BALL SCREW	

Specification		Unit	Data			
Acceleration		G	0.3			
Load		kg	30	60	90	120
Allowable Overhang Distance - mm	Horizontal Use	0°	700	700	605	440
		45°	700	700	700	522
		90°	700	700	700	700
	Wall Installation Use	0°	700	700	478	346
		45°	700	553	358	257
		90°	700	700	640	465
	Vertical Use	0°	700	700	525	395
		45°	700	514	345	260
		90°	700	700	520	390
Note3	Estimated Condition		Max Speed : 1000 mm/s		Acceleration : 0.3 G (2.94/s²)	
			Life in traveled distance : 30000 km			

ACR-ΣV20-PR-75N

* All dimensions in mm
* Brake Motor dimension



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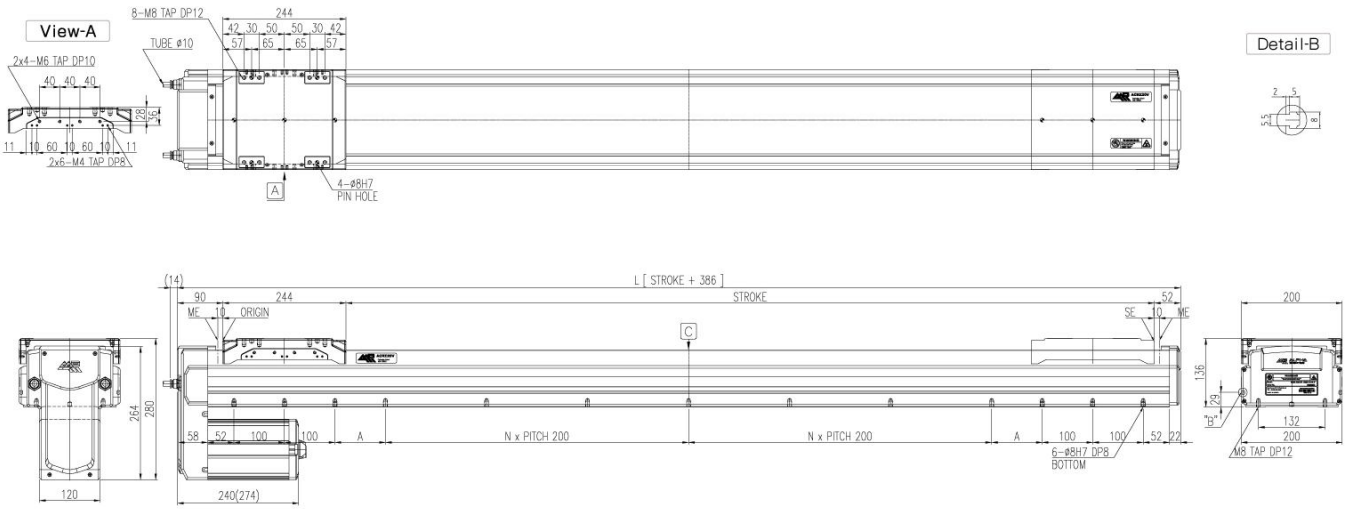

Weight	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV20-PR/PU-75N	kg	24.58	27.41	30.24	33.07	35.90	38.73	41.56	44.39	47.22	50.05	2.83

Speed	Model \ Stroke	Units	100	200	300	400	500	600	700	800	900	1000	Offset(100)
	ACR-ΣV20-PR/PU-N	mm/s	500							478	391	325	Note4
	ACR-ΣV20-PR/PU-H	mm/s	1000							957	782	651	Note4

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NOTE3 In case of use of products beyond allowable overhang value, it may result in malfunction of products.
NOTE4 Regarding speed of over 1,000 stroke products which are not listed on the table, please refer the Specification(30.9page). The speed on the table is for diameter 20 of Ball Screw and please refer the Specification(30.9page) for diameter 25 of Ball Screw.