

NITTOSEIKO

The screw driver with balance arm

Arm-Driver



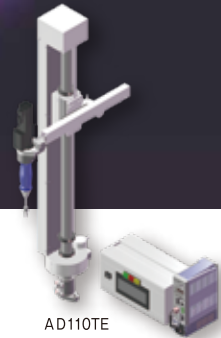
F A S T E N I N G I N N O V A T I O N
f o r T H E F U T U R E



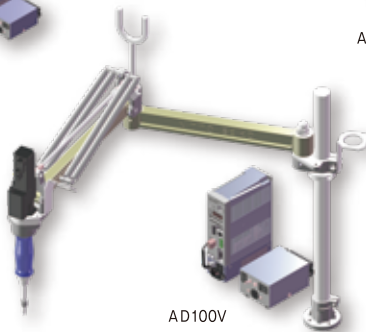
AD100T



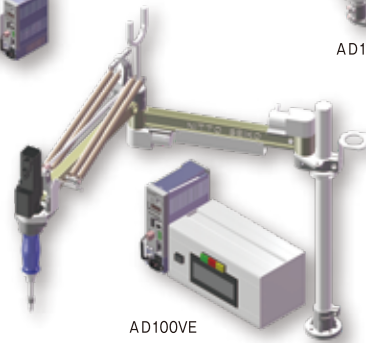
AD100TE



AD110TE



AD100V



AD100VE

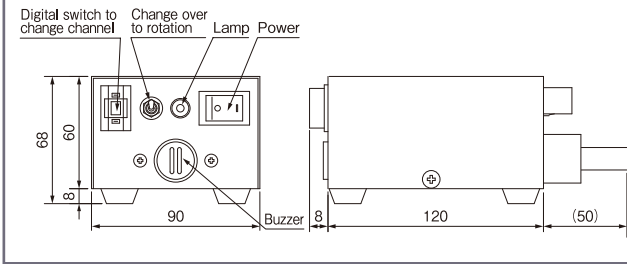
Switch box

Set up distance between each device

Connecting each device name	Connecting cable name	Set up distance
Supporting column ~ Controller	Driver cable(2m)	0.5m or less
Controller ~ Switch box	I/O cable(2m)	2m or less
Controller ~ Power inlet	Power cable(4m) ※1	4m or less
Switch box ~ Power inlet	Power cable(3m) ※2	3m or less

※1 Power cable is not include a plug. ※2 Power cable is include a plug.

Outside dimension (mm)



HC100

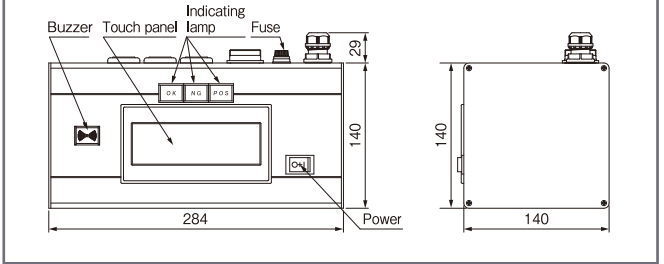
Specifications

Model	HC100
Power supply voltage ※3	Single phase 100-230VAC 50/60Hz
External input	5 points
External output	4 points
Total numbers of point	800 points
Number of models ※4	Max.64 models

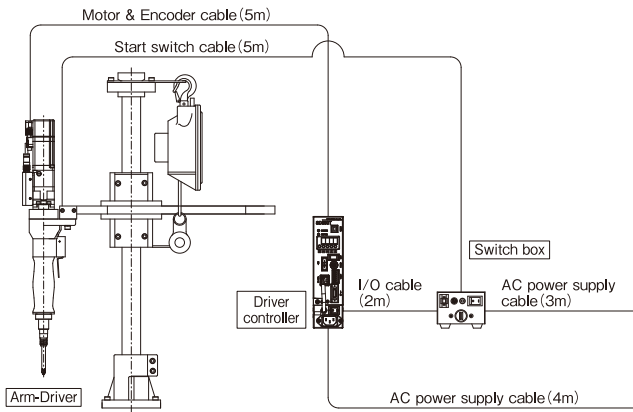
※3 Depends on Driver Type.

※4 An available points in model is max 12 when it using 64 models.

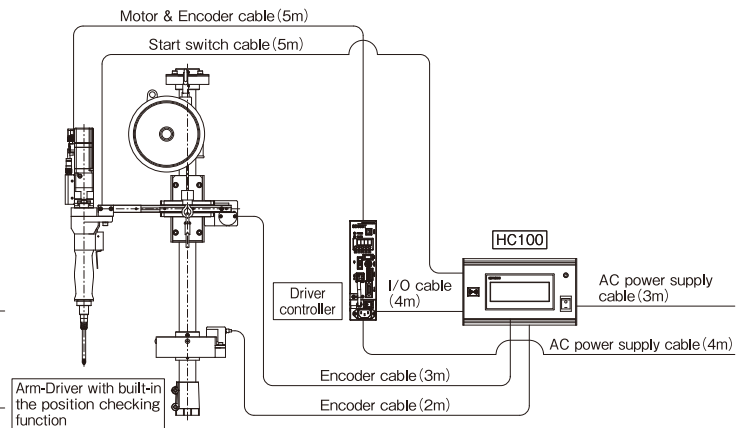
Outside dimension (mm)



Unit configuration diagram



T type Arm-Driver AD100T



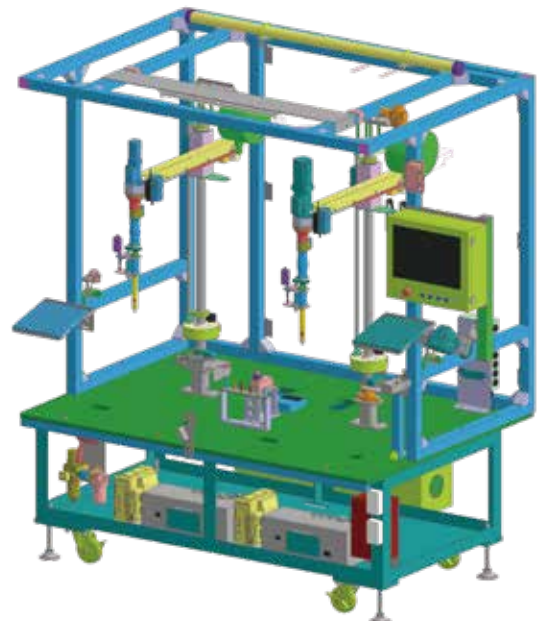
T type Arm-Driver AD100TE with built-in the position checking function

Application example

It will be fitted for the cell or small-rot multi production

The arm-driver with built-in the position checking function which an arm portion is mounted encoder is not only providing the high accuracy screw driving by hand working but also it will be supported to the following condition perfectly.

- 1 Screw driving sequence is already decided
- 2 Necessity of different screw driving torque in a sequence
- 3 Having many kind of workpiece
- 4 Small-rot multi-production



Performs stable screw driving quality which isn't depend on the skill of operator.

Features

- It can be reduced operator's burden by absorbing the torque reaction which is arising from during fastening with arm.
- It can be moving easily the hanging driver or something.
- The mounted driver is our own standard one, it's possible to setup the condition of multi-channel and can be handled the changeover products flexibly.
- Lineup of two type, T type for small-footprint and V type for wide moving space.
- It's easy installed and will be a ready-to-use.

Plus, if regarding the type with position checking function,

- The protection function to forget a fastening is installed. It's possible to change the fastening condition automatically according to the fastening sequence.
- The vertical position detecting function can be possible to check the abnormal condition as floating screw.

Nittoseiko own Driver

Multi-channel setting is possible.

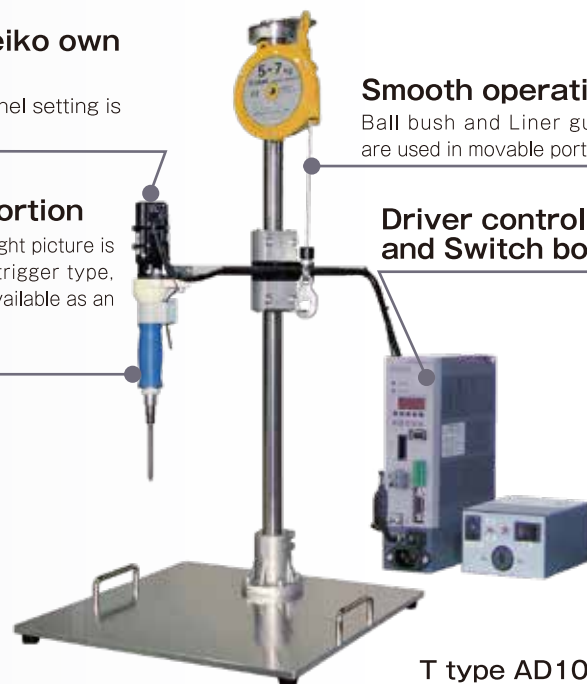
Grip portion

Showing right picture is the lever trigger type, which is available as an option.

Smooth operation

Ball bush and Liner guide are used in movable portion.

Driver controller and Switch box



T type AD100T

Example of machine configuration

Lineup

		T type		V type	
		Standard	Built-in the position checking function	Standard	Built-in the position checking function
Type	Standard	AD100T	AD100TE	AD100V	AD100VE
	Vertical position detecting	—	AD110TE	—	—
	Heavy-duty	—	—	AD500V	AD500VE

Specifications

[] : Optional

Item	T type		V type	
	AD100T·AD100TE	AD110TE	AD100V·AD100VE	AD500V·AD500VE
Working range ※1	Vertical stroke (Max.)	400mm	Vertical stroke (Max.)	437mm 384mm
	Horizontal stroke	200mm	1st Arm Length	380mm
	Angle (Swing Arm)	150°	2nd Arm Length	420mm
Allowable fastening torque ※2	10N·m		18N·m	45N·m
Driver ※3	KX Driver, NX Driver			
Bit type ※4	Cross(+), Slotted(-), HEX, Box and others			
Machine weight	Approx. 18kg	Approx. 25kg	Approx. 12kg	Approx. 15kg
Start trigger method	Push start type, [Lever start type]			
Setting channels number ※5	Max 16 or 32 (torque, fastening condition)			
Self-checking function ※6	message and output signal for system error			
Power supply voltage ※7	Single phase 200-230VAC 50/60Hz, [Single phase 100-115VAC 50/60Hz]			Single phase 200-230VAC 50/60Hz

※1 It doesn't have a mechanical stopper to confine the swing arm direction basically.

※2 This number is calculated to be considered the body strength, thus we can't guarantee if a using torque exceeds this limit. And also allowable torque will be 6N·m or less when it's using by 7mm dia bit.

※3 Please see other catalog for detail of KX and NX drivers.

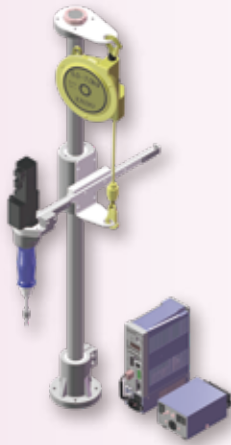
※4 We can be made special bit also, so please feel free to inquire.

※5 Setting channels 32 is only available for SD600T controller.

※6 It's only available with the position checking function.

※7 The supply voltage will be fixed the single phase 200-230V 50/60Hz according to the mounting driver type.

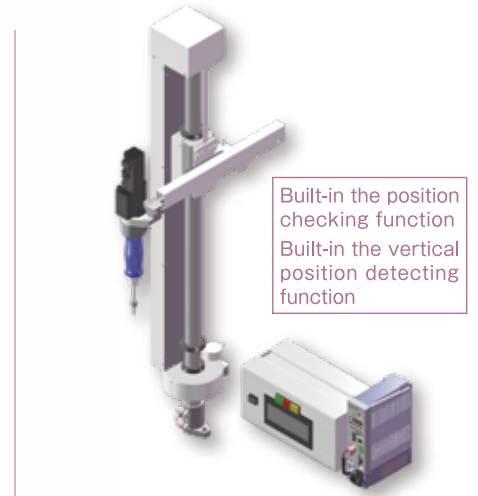
T type Arm-Driver



AD100T



AD100TE

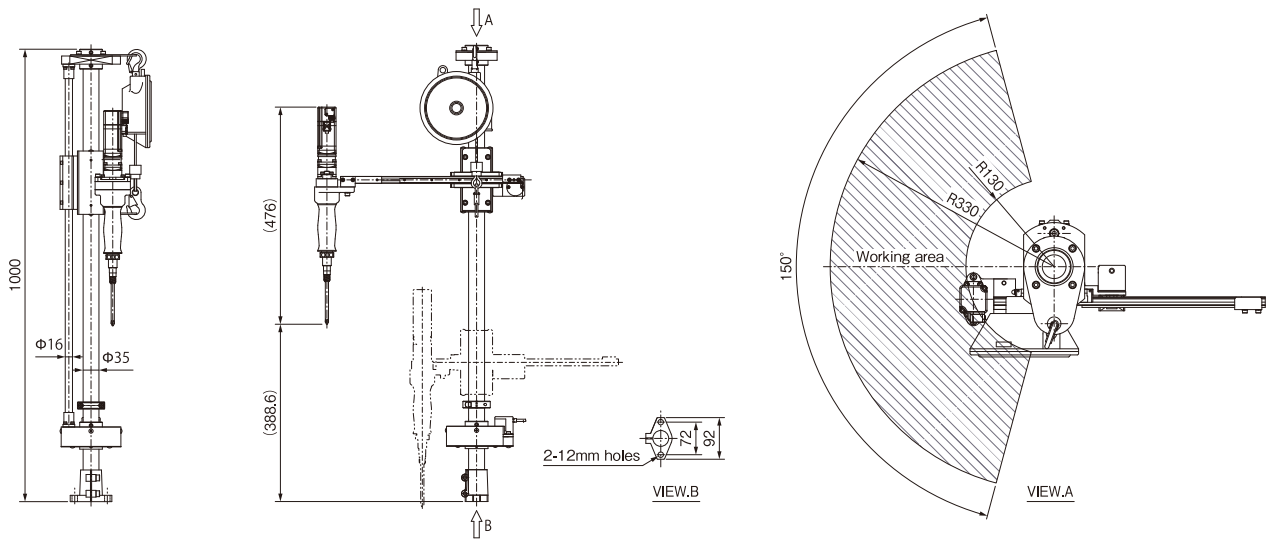


AD110TE

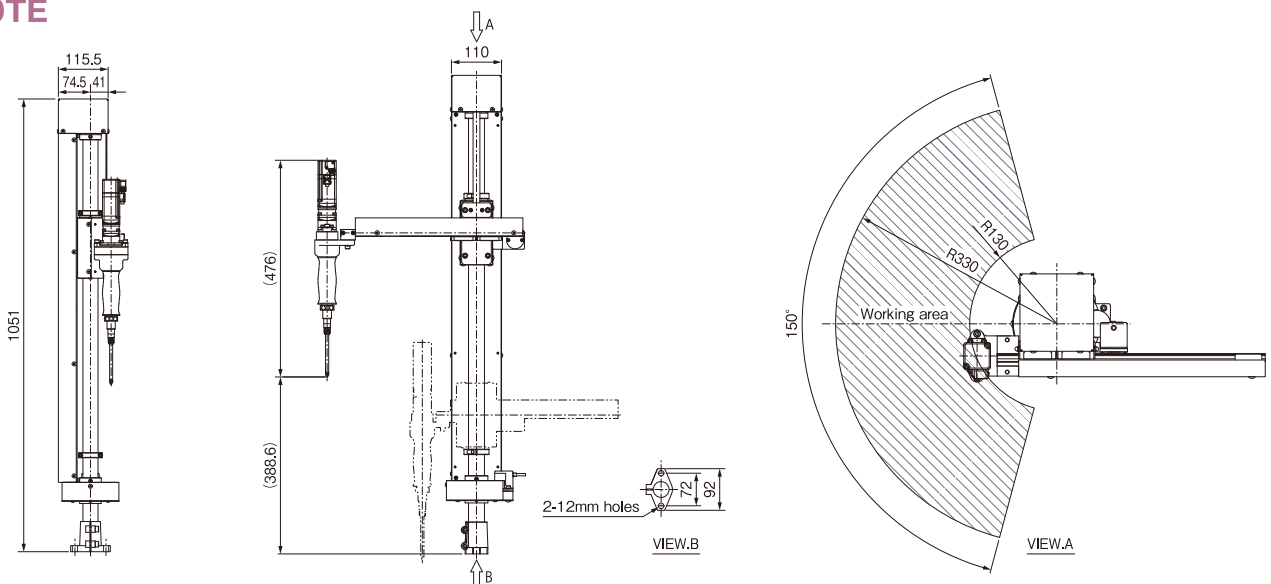
Outside dimension(mm)and Working area

※ Outside dimension and working area will be commonly utilized for both built-in position checking and not built-in this

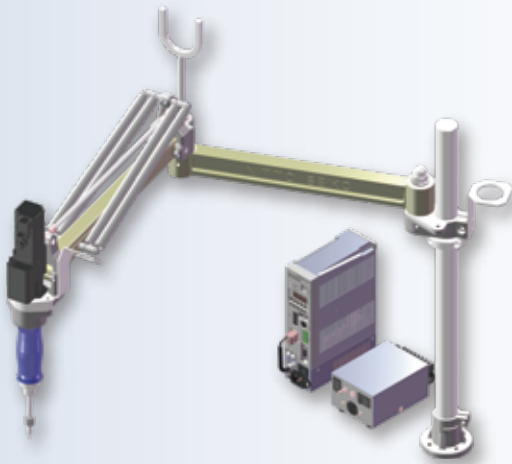
AD100TE



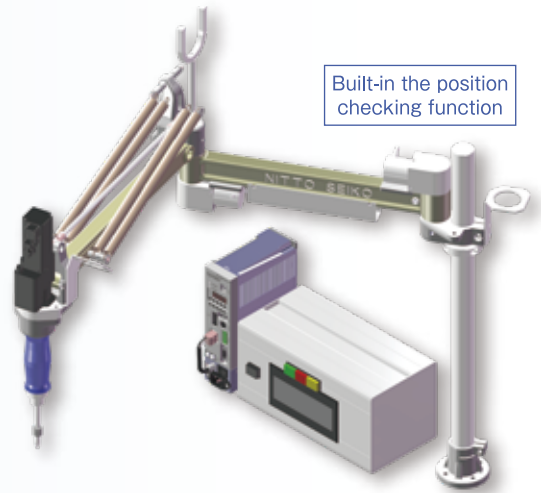
AD110TE



V type Arm-Driver



AD100V (AD500V)

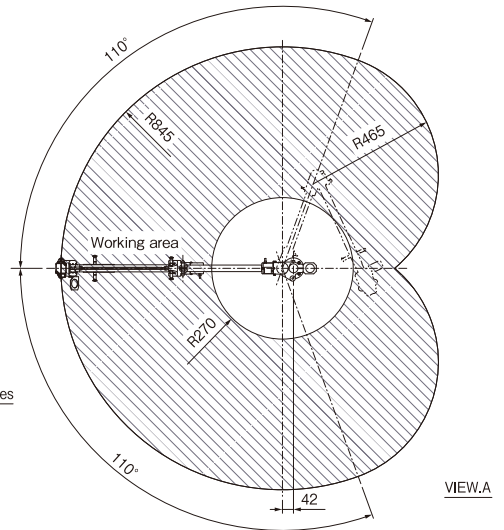
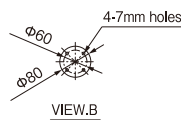
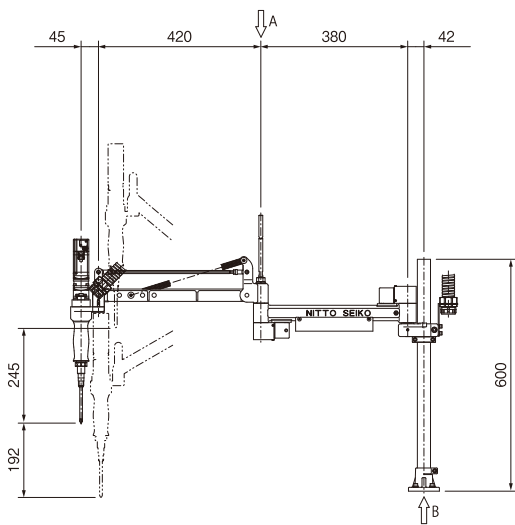


AD100VE (AD500VE)

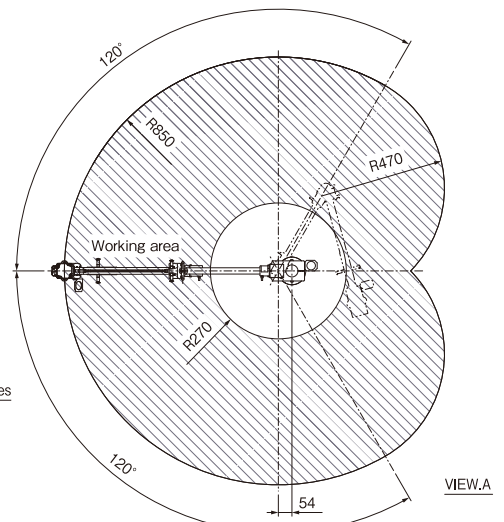
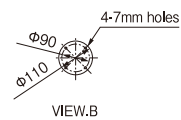
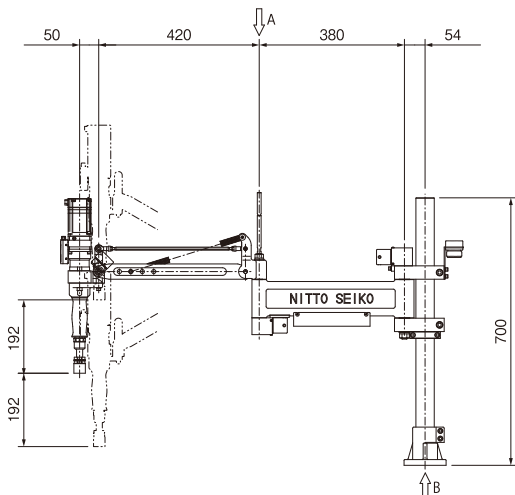
Outside dimension(mm) and Working area

※ Outside dimension and working area will be commonly utilized for both built-in position checking and not built-in this

AD100VE



AD500VE



Selecting chart of driving tool

[] : Optional

Torque of output shaft	KX driver SD550 series								NX driver SD550T series								NX driver SD600T series					
	100N·m	10N·m	1N·m	0.1N·m	0.01N·m	100N·m	10N·m	1N·m	0.1N·m	0.01N·m	100N·m	10N·m	1N·m	0.1N·m	0.01N·m	100N·m	10N·m	1N·m	0.1N·m	0.01N·m		
Tool unit model	050T2-01	100T2-01	150T2-01	100T2-03	150T2-03	150T2-07	400T2-07	400T2-14		008T2-03	020T2-07	050T2-07	100T2-07	180T2-05	250T2-07	500T2-0E	800T2-1B	020T3-07	050T3-07	100T3-07	200T3-06	500T3-0A
Setup torque range N·m	0.08~0.45	0.16~0.91	0.24~1.22	0.5~2.6	0.8~3.8	1.6~8.2	5.0~24	9.0~45		0.2~0.8	0.5~2.0	1.0~5.0	2.5~9.0	5.0~18	8.0~24	15~45	30~80	0.5~2.0	1.0~5.0	2.5~9.0	5.0~20	10~45
Recommend torque range N·m	0.15~0.30	0.3~0.6	0.6~1.0	1.0~2.0	2.0~3.2	3.2~7.0	7.0~20	20~40														
Max. rotation speed min ⁻¹	3,000			1,800		840		420		1,200	840			1,100	840	420	220	1,100			1,000	420
Output torque accuracy	-								3σ/x̄=5% or less		3σ/x̄=3% or less						3σ/x̄=2% or less					
Torque detecting method	Current measurement								Torque sensor (strain gauge)													
Applicable controller model	SD550N05				SD550N10					SD550T03		SD550T05	SD550T10			SD600T03		SD600T05	SD600T10			
Power source	Single phase AC200~230V ±10% 50/60Hz, [AC100~115V] _{※1}					Single phase AC200~230V ±10% 50/60Hz				Single phase AC200~230V ±10% 50/60Hz, [AC100~115V] _{※1}				Single phase AC200~230V ±10% 50/60Hz				Single phase AC200~230V ±10% 50/60Hz				
Max. power requirement kVA	0.35	0.5	0.65	0.5	0.65	1.2			0.6	0.45	0.6	0.75	1.3			0.45	0.6	0.75	1.4			
Controller weight kg	0.75				0.95					0.75			0.95			1.4			1.5			

Model	fastening torque																					
AD100T	10 N·m	●	●	●	●	●	●	● _{※2}	—	●	●	●	●	● _{※2}	—	—	—	●	●	●	● _{※2}	—
AD100TE	10 N·m	●	●	●	●	●	● _{※2}	—	●	●	●	●	● _{※2}	—	—	—	●	●	●	● _{※2}	—	
AD110TE	10 N·m	●	●	●	●	●	● _{※2}	—	●	●	●	●	● _{※2}	—	—	—	●	●	●	● _{※2}	—	
AD100V	18 N·m	●	●	●	●	●	● _{※2}	—	●	●	●	●	●	—	—	—	●	●	●	● _{※2}	● _{※2}	
AD500V	45 N·m	—	—	—	—	—	●	●	—	—	—	—	—	●	●	● _{※2}	—	—	—	●	●	
AD100VE	18 N·m	●	●	●	●	●	● _{※2}	—	●	●	●	●	●	—	—	—	●	●	●	● _{※2}	● _{※2}	
AD500VE	45 N·m	—	—	—	—	—	●	●	—	—	—	—	—	●	●	● _{※2}	—	—	—	●	●	

※1 It's mounted the optional AC power supply unit.
 ※2 Please make sure the setting torque which is within an allowable torque to be used the balance arm.



Here is for the introduction video of products.

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