CHECKWEIGHER

EZI-Check™

CHECKWEIGHER AD-4961 Series

IP65

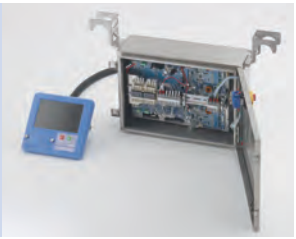
Checkweighing Simplified!

A&D Weighing
andweighing.com.au

A&D have redefined checkweighing with unparalleled

Best-in-class precision

With a newly developed digital load cell and an ultra-high speed processing module, high level precision of 0.08g (3σ)*1 has been realized.
With this high accuracy checkweigher, you can minimize the giveaway of materials above the specified weight and contribute to reductions in production costs.



7 inch color touch panel

The display utilizes a high visibility touch panel color LCD with user friendly Graphic User Interface (audio guidance support function included).

Image import from USB

Product images can be quickly uploaded to the checkweigher from a USB flash drive, making product identification and upload fast and simple.

USB flash drive

IP65

Protected from dust and water to IP65 standards. Hygienic design with the entire system washable.

Stores up to 1000 products

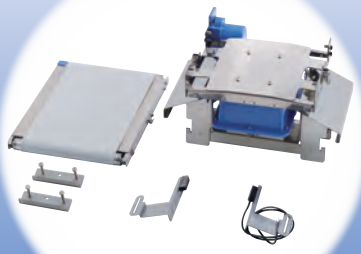
Products can be divided into 10 different groups, with up to 100 products able to be recorded within each group.

Lightweight and compact design

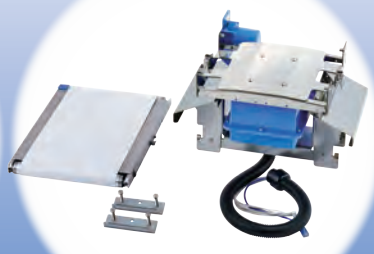
With it's modular structure, the AD-4961 allows for rapid and simple installation or relocation.

Unique modular design

AD-4961 consists of four units: an infeed conveyor unit, a weighing conveyor unit, a control unit and a base unit, allowing fast and simple assembly.
In the case of system shutdown, you do not need to wait for a service engineer to respond to the issue. Just simply replace the unresponsive module by yourself, so that you can shorten system downtime and maximize production efficiency.



Infeed conveyor unit



Weighing conveyor unit

Control unit

Base unit

*1 For AD-4961-2KD-2035. Depends on the shape and the condition of the product and installation environment.

simplicity and best-in-class precision.

Optimization of weighing cofiguration

By inputting throughput (products per minute) or belt speed (m/min), optimal weighing conditions can be automatically set.
You can weigh products precisely without inputting various settings.

History function

Operational history

The history of configuration changes can be recorded and displayed.
Suitable for use in HACCP programs along with the weighing history function.

Users can be registered and their scope of permitted operations controlled according to 4 management levels.

- **[Operator]**
- **[Supervisor]**
- **[Quality Manager]**
- **[Administrator]**

By assigning each user to the appropriate level of access, inadvertent operations can be avoided.*2

*2 "Operator" is set when the power is turned on.

Weighing history

Weighing results are automatically recorded in a USB flash drive during weighing.
Output data: Date, time, group and product number, weight data and judgments.

Weighing history output example:

```
2014/10/3, 19:45:52, 40, 01–001, 100.05, OK
2014/10/3, 19:45:56, 54, 01–001, 150.1, Over
2014/10/3, 19:46:00, 58, 01–001, 70.5, Under
2014/10/3, 19:46:04, 52, 01–001, 0.0, Detect Two
2014/10/3, 19:46:08, 56, 01–001, 0.0, Unsplit
2014/10/3, 19:46:12, 60, 01–001, 100.5, Metal
2014/10/3, 19:46:16, 54, 01–001, 105.1, Ext 1
2014/10/3, 19:46:20, 78, 01–001, 95.5, Ext 2
```

Date | Time | Group / Product number | Weight | Judgment

USB memory

Approx. 6MB memory size is required for 8 hours operation at the maximum throughput (320pcs/min.)

Approx. 7GB memory size is required for 24hours 365days operation.

A new checkweigher which can be used for easy system design

Modbus® communication

Equipped with Modbus RTU/Modbus TCP as standard.
With Modbus communication, seamless connection can be easily achieved.
Operations such as stopping and starting weighing, collecting
data and changing product can all be set from an external device.

Various inputs / outputs

Rejector output , alarm output, metal detector input, RS-232C,
TCP/IP and USB interface are equipped as standards.
Storing data in a USB flash drive or outputting to a printer are also possible.

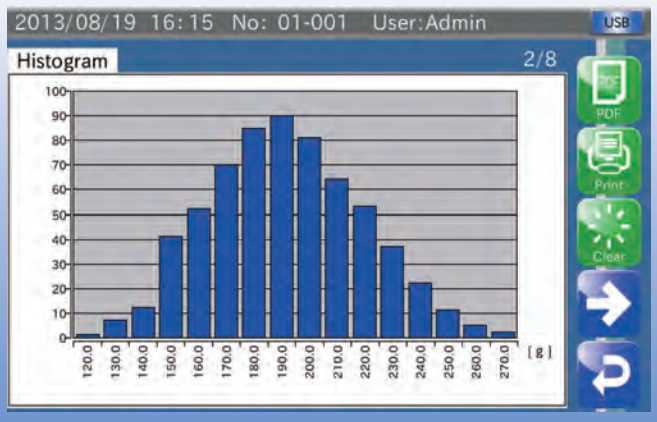
Graph printing to a printer

Histogram, X/R control charts and summary reports can be outputted
to a PostScript printer via Ethernet.

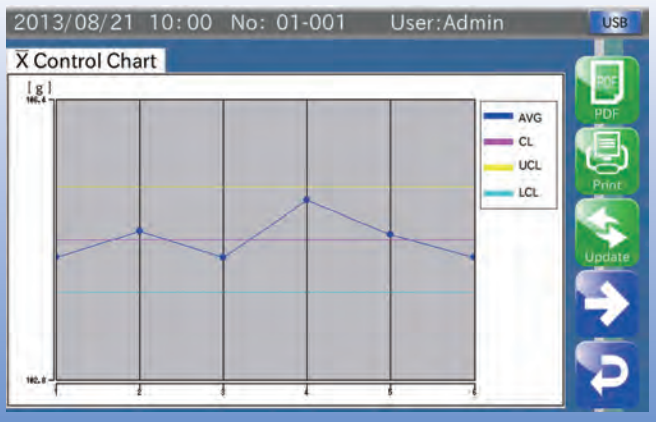
Data summary

Various summary data such as histograms (frequency including defects),
X charts, R charts, total summaries, etc., are available.
You can visually confirm fluctuation of weighing results and adjust your
manufacturing machine accordingly.

Histogram display screen



$\bar{X}$ chart screen

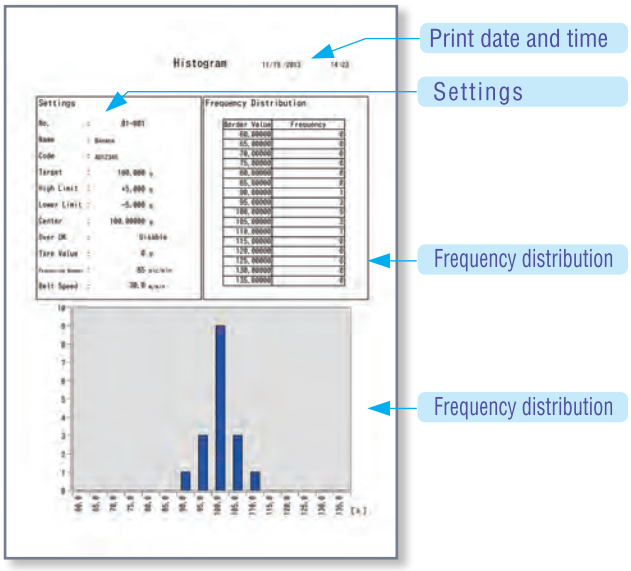


with connection and communication with external devices

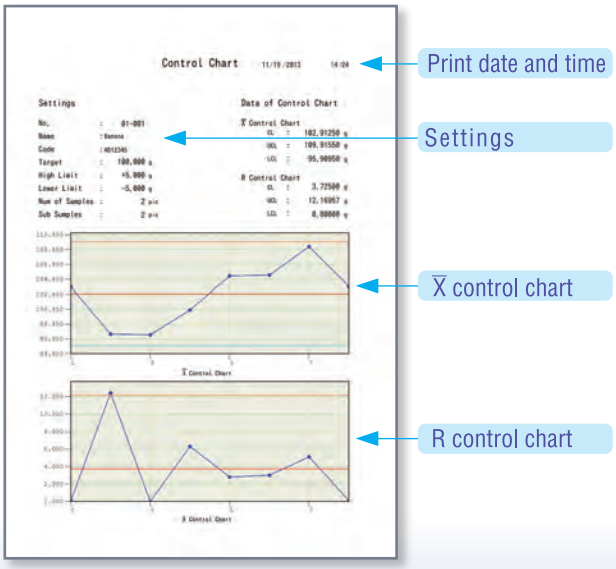
Histogram, control charts and summary reports

After weighing, press the PDF key on the summary display. A PDF report is outputted to a USB flash drive.
The same reports can be printed out by pressing the PRINT key when a PostScript printer is connected to the checkweigher.

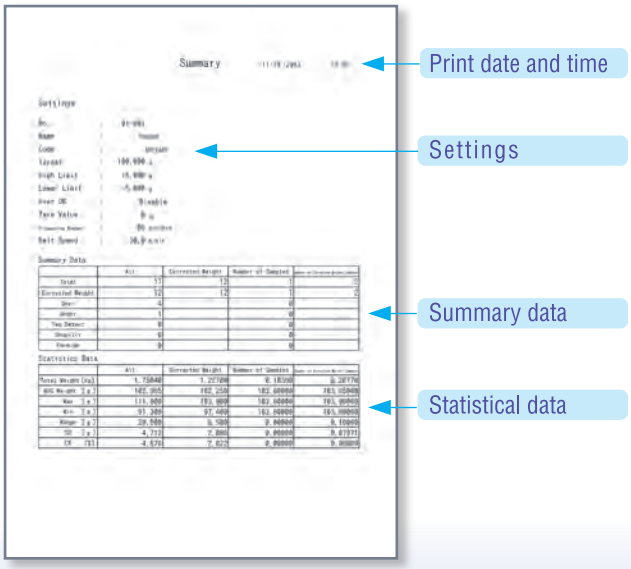
Histogram printing example



Control chart printing example



Summary results printing example



USB memory function

Weighing history and operation history are stored in a USB flash drive.
You can also output histogram, X/R control charts or summary data to a USB flash drive in PDF format.
A USB flash drive needs to be inserted before weighing.

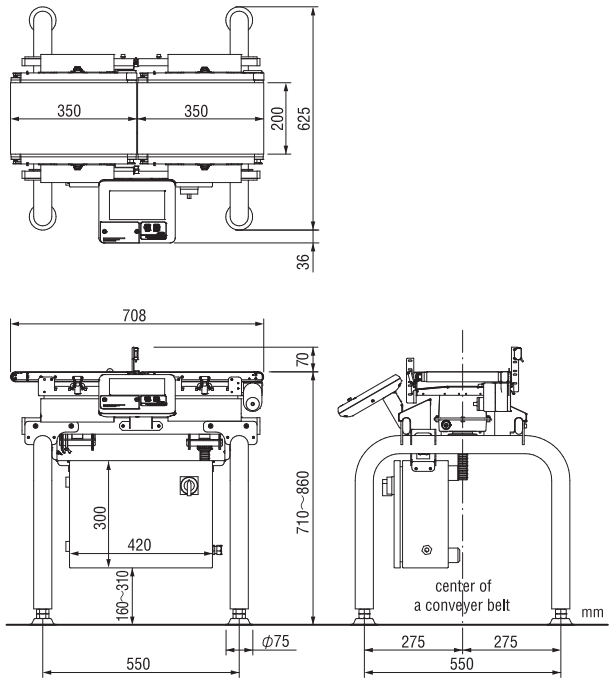
*Please prepare a USB flash drive.

AD-4961-2KD-2035 Capacity 2,000g Conveyor belt width 200mm

Specifications

Model	AD-4961-2KD-2035
Capacity	500g / 2,000g
Resolution	0.01g / 0.1g
Accuracy (3σ)*1	0.08g / 0.18g
Max. throughput	320pcs/min
Conveyor belt width	200mm
Conveyor length	350mm
Transport medium	Urethane belt
Conveyor belt speed	15～120m/min
Max. product dimensions	Length:30～300mm Width:200mm
Weighing sensor	Strain gauge load cell
Display	7inch touch panel color display (WVGA)
Operation method	Touch panel (resistive film type), operation buttons
Number of recorded items	1,000 items (10 groups x 100 items)
Communication functions	Modbus TCP / Modbus RTU / RS-232C/485 (selectable) / TCP/IP(PostScript printer)
	/ USB (for PostScript printer, USB memory, data storage, image import use)*3
External input	Non-voltage contact input 4points
External output	Relay output 8points
Dust/water resistance specifications	IP65
Operation temperature/humidity range	–5 ～ 40℃ / humidity below 85%(with no condensation)
Power supply *4	Single phase AC100V-240V(+10% / -15%), 50/60Hz 180VA
External dimensions *2	Length:700mm / Width:660mm / Height:710-860mm
Weight *2	Approx. 35kg
Material	Display : ABS resin
	Conveyor unit : Aluminum(alumite coating) and PP resin
	Control box : Stainless steel
	Base unit : Stainless steel

*1 Depends on the shape and the condition of the product and installation environment.
*2 Values for external dimensions and weight are for the standard condition without rejector.
*3 USB memory must be formatted to FAT32.
*4 Please prepare a φ4-7mm power cable.



AD-4961-2KD-2035 External Dimensions

AD-4961-2KD-2035
checkweigher with flipper rejector

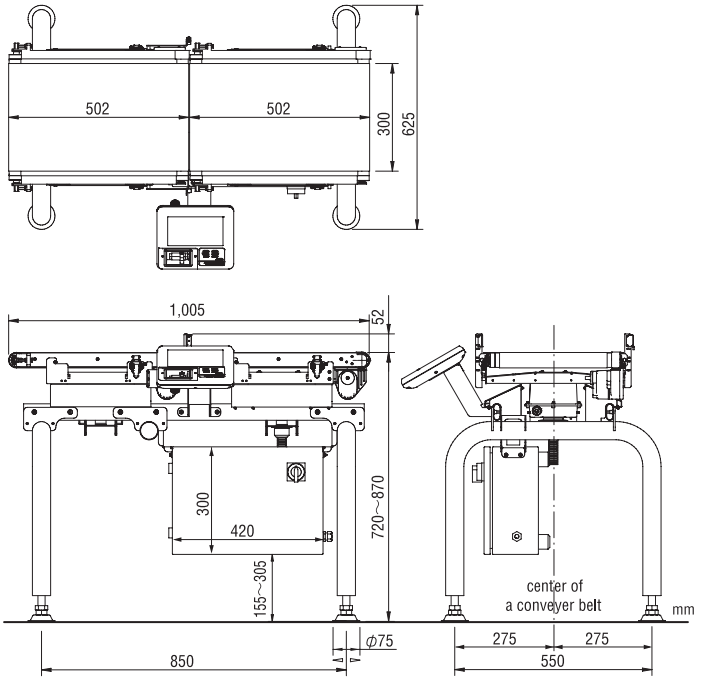
AD-4961-6K-3050

Capacity **6,000g** | Conveyor belt width **300mm**

Specifications

Model	AD-4961-6K-3050
Capacity	6,000g
Resolution	0.5g
Accuracy (3σ)*1	1.5g
Max. throughput	145pcs / min
Conveyor belt width	300mm
Conveyor length	500mm
Transport medium	Urethane belt
Conveyor belt speed	10～80m / min
Max. product dimensions	Length : 80～450mm Width : 300mm
Weighing sensor	Strain gauge load cell
Display	7inch touch panel color display (WVGA)
Operation method	Touch panel (resistive film type), operation buttons
Number of recorded items	1,000 items (10 groups x 100 items)
Communication functions	Modbus TCP / Modbus RTU / RS-232C/485 (selectable) / TCP/IP(PostScript printer) / USB (for PostScript printer, USB memory, data storage, image import use)*3
External input	Non-voltage contact input 4points
External output	Relay output 8points
Dust/water resistance specifications	IP65
Operation temperature/humidity range	–5 ～ 40℃ / humidity below 85%(with no condensation)
Power supply *4	Single phase AC100V-240V(+10% / -15%), 50/60Hz 180VA
External dimensions *2	Length : 1005mm / Width : 736mm / Height : 720-870mm
Weight *2	Approx. 50kg
Material	Display : ABS resin
	Conveyor unit : Aluminum(alumite coating) and PP resin
	Control box : Stainless steel
	Base unit : Stainless steel

*1 Depends on the shape and the condition of the product and installation environment.
*2 Values for external dimensions and weight are for the standard condition without rejector.
*3 USB memory must be formatted to FAT32.
*4 Please prepare a φ4-7mm power cable.



AD-4961-6K-3050 External Dimensions

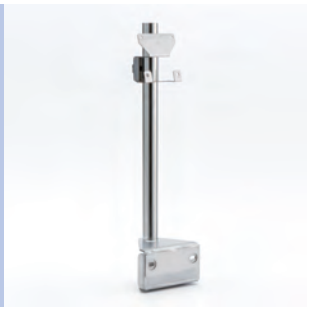
AD-4961-6K-3050
with optional display stand,
tower light and pusher rejector

Options

Optional tower light
and display stand installed.

Display stand
AD-4961-01

The display is attached on the opposite side from
the standard display position, across from the user.
The display is located approx.
310mm above the conveyor belt.



Tower light
AD-4961-02

Highly visible three color LED tower light.
Easy configuration with the AD-4961 checkweigher using
DO (Digital Output) map setting.

*AD-4961-01 display stand is required to install this option.
*Dust and water resistance level is IP53.

Upper breeze break
AD-4961-11

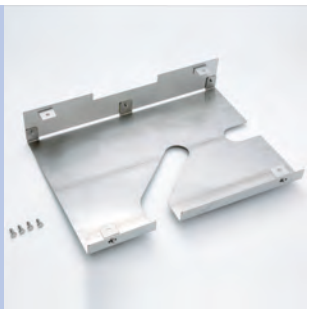
Anti-static breeze break prevents air currents to the weighing
conveyor and static electricity to achieve accurate weighing.
Clearance between the conveyor belt and the breeze break is 135mm.
Use together with the lower breeze break is recommended.
Material : PVC anti-static plate

*This option is for AD-4961-2KD-2035.

Lower breeze break
AD-4961-12

Prevents air currents from underneath the system to ensure
accurate weighing.
Use together with the upper breeze break is recommended.
Material : Stainless steel

*This option is for AD-4961-2KD-2035.

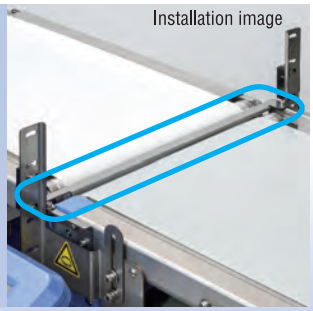


Optional upper
and lower breeze break installed.

Cross plate
AD-4961-13

Eliminates gap between infeed conveyor and weighing
conveyor and conveys products smoothly.
Suitable for weighing small products.
Material : Stainless steel

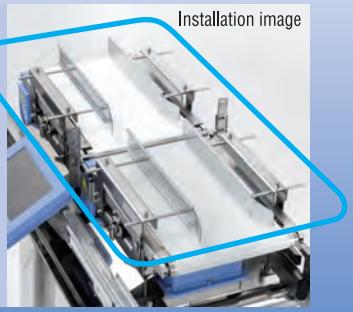
*This option is for AD-4961-2KD-2035.



Product guide
AD-4961-14

Installed on both infeed and weighing conveyors.
Adjusts products to be conveyed on the center of both conveyors.
Applicable product width is from 50mm to 100mm.
Material : Stainless steel

*This option is for AD-4961-2KD-2035.



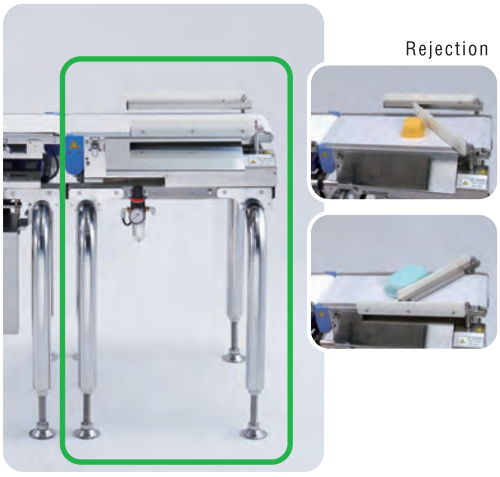
Rejector For AD-4961-2KD-2035

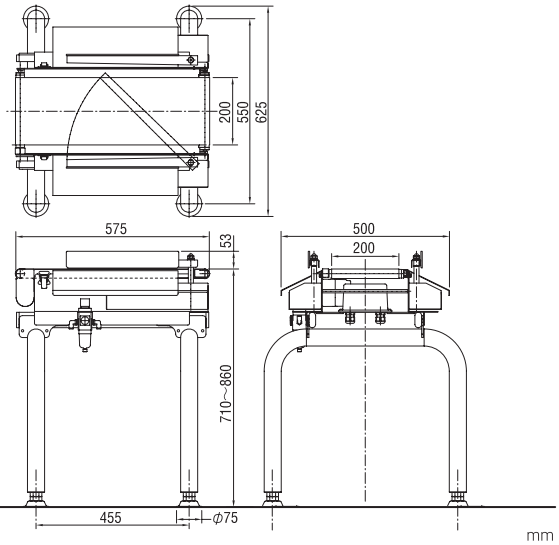
Please prepare an air compressor with a ϕ6mm air tube to be connected to the filter regulator of the rejector. Air supply: 0.5MPa, 0.1NL/time

Flipper type rejector

AD-4981-2057

Screening capability
120pcs/min.





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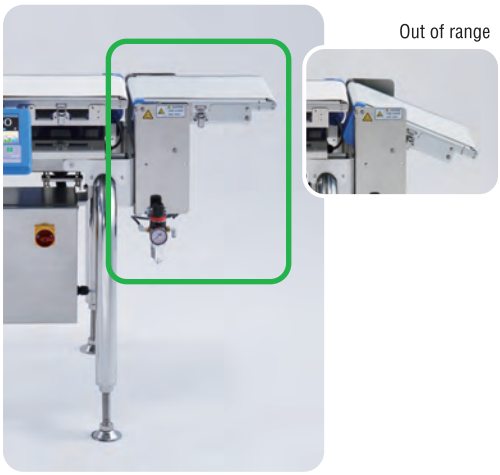
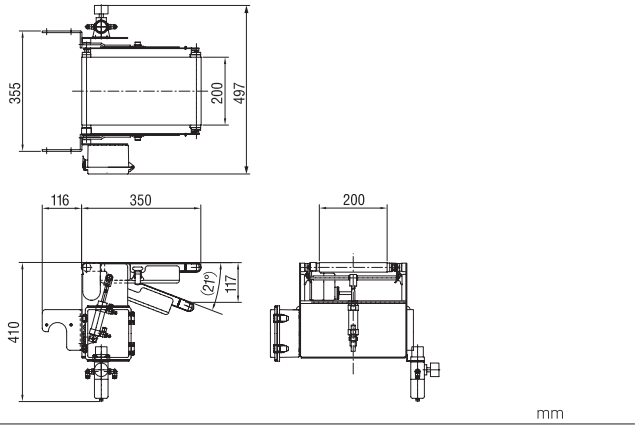
Conveyor drop rejector

AD-4982-2035

Screening capability
150pcs/min.





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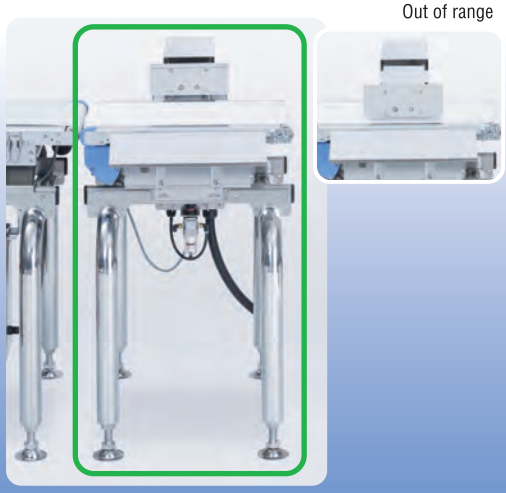
Rejector For AD-4961-6K-3050

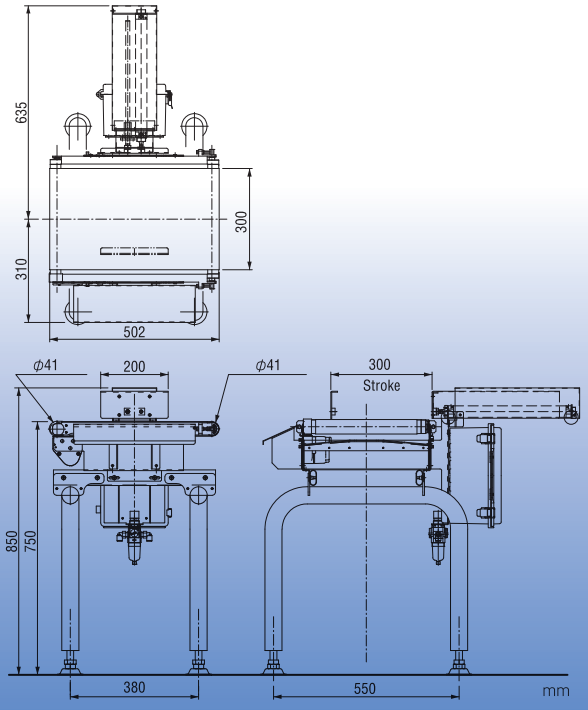
Please prepare an air compressor with a ϕ6mm air tube to be connected to the filter regulator of the rejector. Air supply: 0.5MPa, 0.3NL/time

Pusher rejector

AD-4983-3050

Screening capability
60pcs/min.





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EZI-Check™

We supply checkweigher modules individually, allowing you to build a weighing system which fits y

Weighing unit
AD-4961-2K-WU

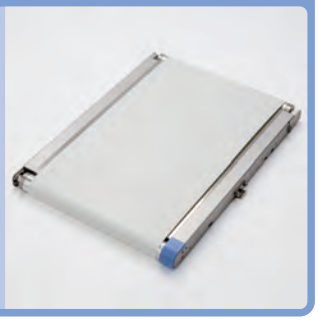
High accuracy digital output module.
Stopper mechanism protects the load cell from overload.
Easy connection to the AD-4961-CNT control unit.
Dust and waterproof to IP65.
Motor cable included.

Motor base unit
AD-4961-2035-MOB

Motor base unit for 200mm width conveyor belt.
Motor unit is pre-installed.
Dust and waterproof to IP65 when used with the AX-KO4223-080 cable.
2 sets are required for the infeed conveyor and the weighing conveyor.

Weighing conveyor unit
AD-4961-2035-WCV

A conveyor unit with balance adjusted pulleys enables accurate weighing.
*Different from the infeed conveyor unit.



Color touch panel display unit
AD-4961-DISP

7 inch color touch panel display with a USB memory port.
Easy connection to the AD-4961-CNT control unit.

Control unit
AD-4961-CNT

Water and dust proof to IP65.

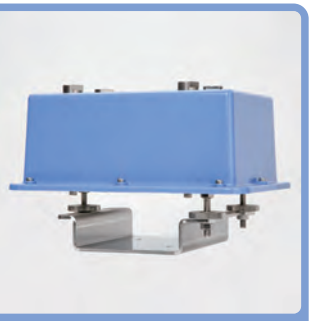
Communication functions:
- Modbus TCP/Modbus RTU (RS485)
- RS232C/RS485 (selectable)
- TCP/IP for PostScript printer
- USB(USB memory for storing data, capturing images and connection to a PostScript printer.)

Base functions:
- Item registration: 1000 items
- Non-voltage inputs: 4 points
- Relay outputs: 8 points
- Power supply: Single phase AC100-240V

Load cell connection:
- Please use the AD-4961-2K-WU

Infeed unit
AD-4961-INF

Conveyor height can be adjusted with this unit.



Attachment brackets
AD-4961-UF

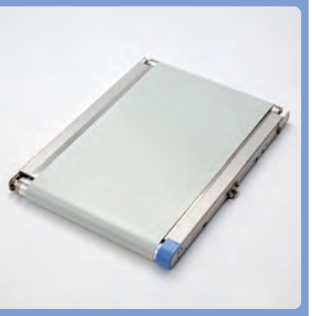
Attachment brackets to fix the infeed unit and weighing unit.

* 2 sets are required for the infeed unit and the weighing unit.

* 2 sets are shown in the photo.

Infeed conveyor unit
AD-4961-2035-ICV

*The pulleys for the infeed conveyor unit are not balance adjusted.
The conveyor belt is different from the one for the weighing conveyor.



Base unit
AD-4961-2035-FP

Consists of feet and side beams.
2 sets of AD-4961-UF are installed on the base unit.

Photo sensor with attachment
AD-4961-81-2K

Attachment for the display unit
AD-4961-80-2K

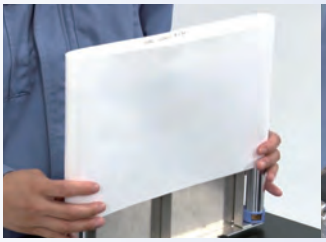
*Display is not included.

Motor cable
for the infeed conveyor
AX-KO4223-080

*Motor is not included.

Maintenance kit for AD-4961-2KD-2035

The maintenance kit contains disposable parts that need to be replaced periodically.
These maintenance parts are easy to replace, so system downtime can be minimized.



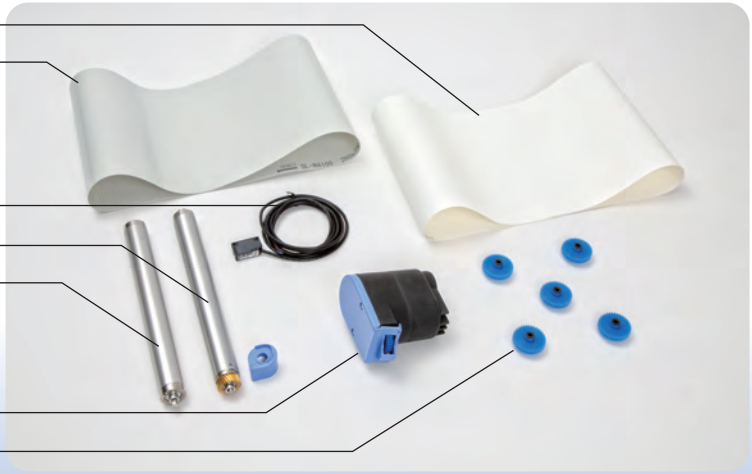
Replacing a belt

Replacing a gear

Replacing a conveyor

Replacing a gear motor

Weighing conveyor belt : 1pcs
Infeed conveyor belt : 1pcs
Photo sensor without reflector : 1pcs
Drive pulley (balance adjusted) : 1pcs
Idle pulley (balance adjusted) : 1pcs
Motor unit (including a plastic gear) : 1unit
Plastic gears : 5pcs



Both the drive pulley and the idle pulley are balance adjusted,
so they can be installed to either the infeed conveyor or the weighing conveyor.

The pulleys that were originally installed to the infeed conveyor should not be
installed to the weighing conveyor.

A&D Weighing "Excellence in Measurement"
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