

**Operating Instructions**

**Bench Platform Puro®**



98628-000-64

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## **Foreword**

### **Must be followed!**

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# 1 Introduction

## 1.1 Read the manual

- Please read this manual carefully and completely before using the product.
- This manual is part of the product. Keep it in a safe and easily accessible location.

## 1.2 This is what operating instructions look like

1. - n. are placed before steps that must be done in sequence.
  - ▶ is placed before a step.
  - ▷ describes the result of a step.

## 1.3 This is what lists look like

- indicates an item in a list.

## 1.4 This is what menu items and softkeys look like

[ ] frame menu items and softkeys.

**Example:**

[Start]- [Applications]- [Excel]

## 1.5 This is what the safety instructions look like

Signal words indicate the severity of the danger involved when measures for preventing hazards are not followed.

### **DANGER**

#### **Warning of personal injury**

DANGER indicates death or severe, irreversible personal injury which will occur if the corresponding safety measures are not observed.

- ▶ Take the corresponding safety precautions.

### **WARNING**

#### **Warning of hazardous area and/or personal injury**

WARNING indicates that death or severe, irreversible injury may occur if appropriate safety measures are not observed.

- ▶ Take the corresponding safety precautions.

### **CAUTION**

#### **Warning of personal injury.**

CAUTION indicates that minor, reversible injury may occur if appropriate safety measures are not observed.

- ▶ Take the corresponding safety precautions.

**NOTICE****Warning of damage to property and/or the environment.**

NOTICE indicates that damage to property and/or the environment may occur if appropriate safety measures are not observed.

- ▶ Take the corresponding safety precautions.

**Note:**

User tips, useful information, and notes.

## 2 Safety instructions

### 2.1 General safety information

Follow these safety precautions:

- The equipment may only be used as intended for weighing tasks.
- Observe the operating limits of the device.
- Avoid shock stress (falling down, hard shocks, falling loads, any impact from the side).
- Do not use the equipment in hazardous areas and unstable environments.
- Do not expose the equipment to aggressive chemical vapors or to unnecessarily extreme temperatures, moisture, or vibration.
- Unplug the device before you connect or disconnect any electronic peripheral devices to or from the interface port.
- Unplug the power cord from the mains supply before cleaning.
- Make sure that no liquid enters the equipment.
- Do not use loads that exceed the capacity of the scale.
- Do not lift the base by the top frame. Always lift from the bottom frame when moving the base.

### 2.2 Incoming goods inspection

The shipment must be checked for completeness. A visual inspection must be performed to determine if the shipment has been damaged. If there are grounds for a complaint, this must be brought to the attention of the delivery company immediately. A Minebea Intec sales or service point must be informed. Visit our website <http://www.puroscales.com> or contact your dealer.

### 2.3 Before operational startup

#### **NOTICE**

#### **Perform visual inspection.**

Before operational startup as well as after storage or transport, inspect the product visually for signs of mechanical damage.

- The product may not be put into operation if it has visible damage and/or is defective.

## 3 Setup instructions

### 3.1 Package Contents

- Bench platform
- Safety Instructions and QR code with access to the detailed documentation

### 3.2 Requirements on location

- Set up the device on a stable, even surface.
- Position the device so that the load cell cable is not an obstacle or trip hazard.
- Avoid placing the device in close proximity to a heater or otherwise exposing the scale to heat or direct sunlight.
- Do not expose the device to excessive temperature fluctuations.
- Protect the device from drafts that come from open windows or doors.
- Avoid exposing the device to extreme vibrations during weighing.
- Protect the device from aggressive chemical vapors.
- Do not expose the device to extreme moisture over long periods.

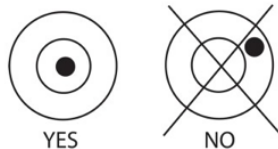
### 3.3 Leveling the equipment

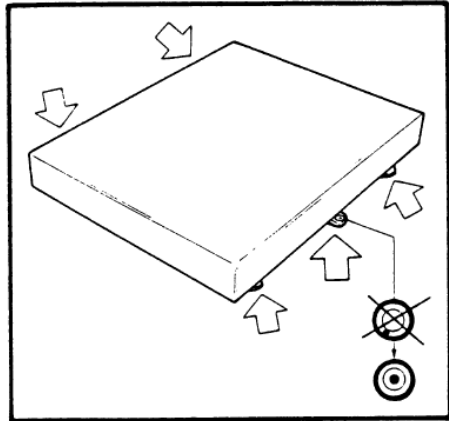
**Purpose:**

- to compensate for unevenness at the place of installation
- to ensure that the device is placed in a perfectly horizontal position for consistently reproducible weighing results

Always re-level the device any time after it has been moved to a different location.

- ▶ Level the scale using the four leveling feet.
- ▶ Ensure that all leveling feet make contact with the floor.
- ▶ Turn the feet until the air bubble is centered in the level indicator.
  - ▷ Each of the leveling feet must support an equal load.
- ▶ Adjusting the leveling feet: To raise the scale, extend the leveling feet (turn clockwise). To lower the weighing platform, retract the leveling feet (turn counterclockwise).



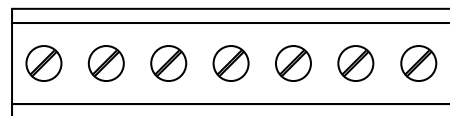
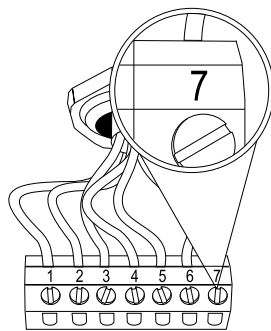




## 4 Connect platform

Connection of an analog Puro® platform, or a commercially available strain-gauge load cell with Puro® indicator.

1. Turn the indicator off and disconnect it from power supply.
2. Turn the indicator upside down.
3. Remove the four rubber plugs at the rear side.
4. Loosen the screws underneath.
5. Take the cover off.
6. Loosen the cable gland.
7. Insert the platform cable through the cable gland.
8. Screw the wires of the platform cable tightly into the clamps according to pin assignments and to the colour coding of the connection cable of the platform/load cell.



DGND S- S+ V- EX- EX+ V+

1	DGND	Digital ground
2	S-	Signal-
3	S+	Signal+
4	V-	Sense-
5	EX-	Excitation-
6	EX+	Excitation+
7	V+	Sense+

9. Tighten the cable gland.
10. Reassemble housing, tighten screws and insert rubber plugs.

## 4.1 Color codes

### Wiring of load cell cable

<b>Model number</b>	<b>EX+</b>	<b>EX-</b>	<b>S+</b>	<b>S-</b>	<b>V+</b>	<b>V-</b>	<b>SCREEN</b>
EF-DDP30-6d	red	black	green	white	n/a	n/a	bare
EF-DDP60-6d	red	black	green	white	n/a	n/a	bare
EF-FEP60-6d	red	black	green	white	n/a	n/a	bare
EF-FEP150-6d	red	black	green	white	n/a	n/a	bare
EF-GFP150-6d	red	black	green	white	blue	yellow	bare
EF-GFP300-6d	red	black	green	white	blue	yellow	bare
EF-DDS30-6d	green	black	white	red	blue	yellow	bare
EF-DDS60-6d	green	black	white	red	blue	yellow	bare
EF-FES60-6d	green	black	white	red	blue	yellow	bare
EF-FES150-6d	green	black	white	red	blue	yellow	bare
EF-GFS150-6d	red	yellow	blue	white	brown	black	bare
EF-GFS300-6d	red	yellow	blue	white	brown	black	bare

## 5 Technical data

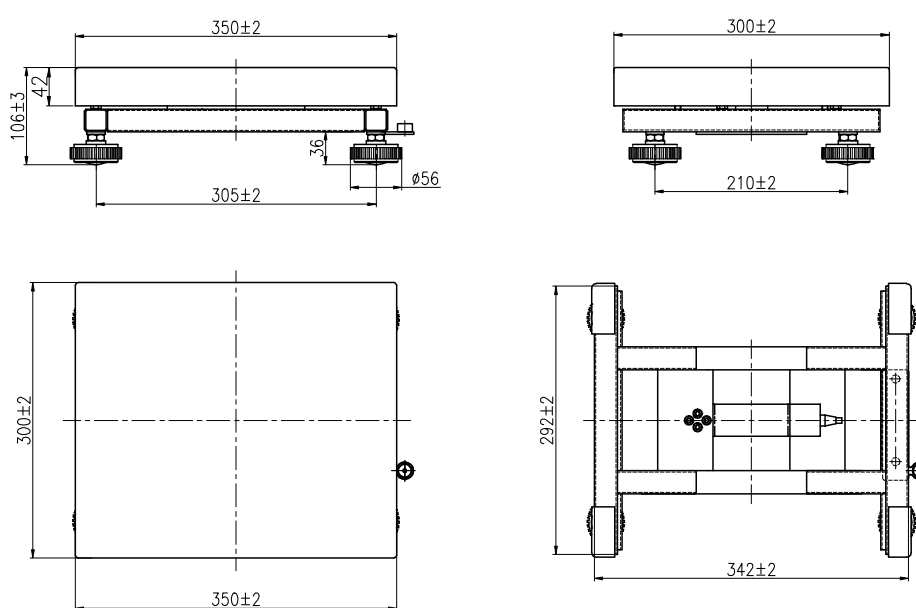
### 5.1 Specifications

Model number	EF-	30	60	150	300
Capacity (g)		30,000	60,000	150,000	300,000
Readability d (g)		5	10	20	50
Maximum resolution		6,000	6,000	7,500	6,000
Repeatability		1 d	1 d	1 d	1 d
Linearity		±1 d	±1 d	±1 d	±1 d
Dimension mm (w x d x h)	DD	355 x 305 x 123	355 x 305 x 123	-	-
	FE	-	550 x 420 x 136	550 x 420 x 136	-
	GF	-	-	650 x 500 x 143	650 x 500 x 143
Construction/material platform	P	painted carbon steel frame, 1.2 mm 304 stainless steel load plate			
	S	all 304 stainless steel structure			
Safe overload capacity		150% of rated scale capacity			
Ultimate overload capacity		300% of rated scale capacity			
Corner loading overload capacity		100% of rated scale capacity			
Levelling components		externally visible level indicator and adjustable, non-slip levelling feet			
Feet		4 adjustable non-slip levelling feet			
Operating temperature (°C)		-10...40			
Storage temperature (°C)		-30...70			
Load cell protection		IP67			
Load cell excitation voltage		maximum 18V (AC/DC) / recommended 5V-12V (AC/DC)			
Net weight (kg)	DD	7.5	7.5	-	-
	FE	-	16.65	16.65	-
	GF	-	-	20.6	20.6
Shipment dimension mm (w x d x h)	DD P/S	400 x 360 x 140	400 x 360 x 140	-	-
	FE	-	600 x 480 x 165	600 x 480 x 165	-
	GF	-	-	700 x 560 x 165	700 x 560 x 165
Shipping weight (kg)	DD P	15	15	-	-

Model number	EF-	30	60	150	300
	S	18	18	-	-
	FE	P	-	23	23
		S	-	26	26
	GF	P	-	-	37
		S	-	-	38

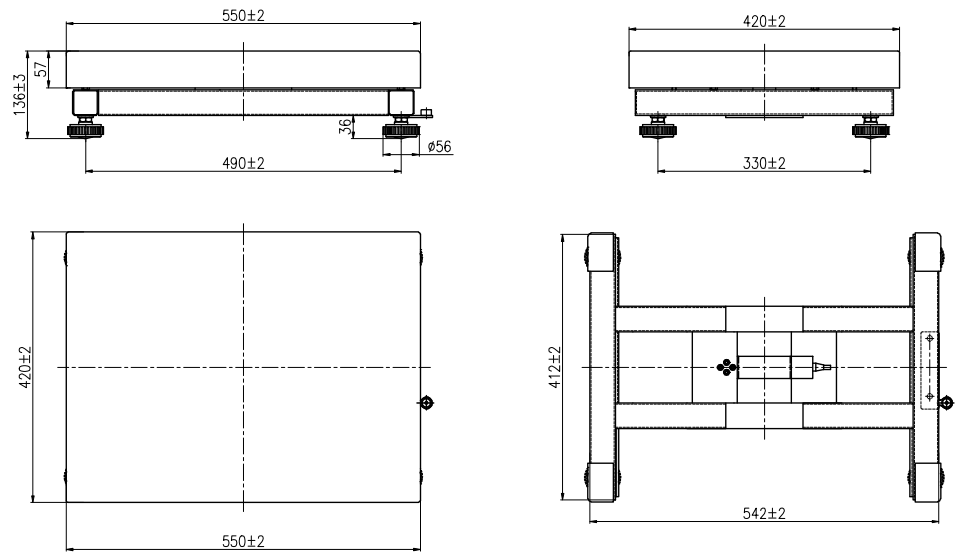
## 5.2 Dimensions

### EF-DDP-.../EF-DDS-...



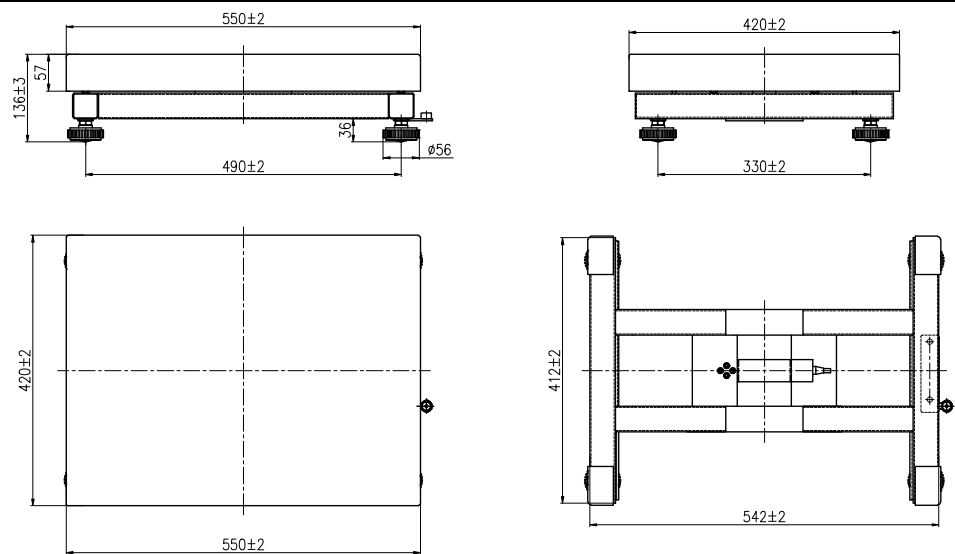
all dimensions in mm

**EF-FEP-.../EF-FES-...**



all dimensions in mm

**EF-GFP-.../EF-GFS-...**



all dimensions in mm

## 6 Maintenance/repairs/cleaning

### 6.1 Repairs

Immediately disconnect a defective device from the power supply.

Defective or damaged cables or screw connections must be replaced as a complete unit.

The seals placed on the device indicate that the device may only be opened and serviced by authorized specialists to ensure trouble-free and safe operation of the device, and to ensure that the warranty remains valid.

#### **WARNING**

**Improper repairs can pose considerable risks to the user.**

- ▶ Repairs should only be performed by Minebea Intec authorized dealers using original spare parts.

### 6.2 Cleaning

#### 6.2.1 Cleaning instructions

The device should be cleaned at regular intervals.

Disconnect the device from the supply voltage before cleaning.

Remove all traces of corrosive substances on a regular basis.

If the scale is located in a dry environment, then wipe the weighing platform using a damp cloth.

Devices with IP rating IP65 or higher can also be rinsed with a water jet directed at the load plate from above.

Condensation may form in the device if it is cleaned with water that is too hot or too cold, due to temperature differences. Condensation may cause the device to malfunction.

#### 6.2.2 Cleaning agents

#### **NOTICE**

**Some cleaning agents may not be compatible with the device material.**

- ▶ Do not use cleaning agents for stainless steel parts that contain chlorine, alkalines, acetic acid, hydrochloric acid, sulfuric acid, or citric acid.
- ▶ The use of cleaning sponges made of steel wool is prohibited (e.g. S.O.S pads).
- ▶ Use a damp cloth or sponge to clean stainless steel parts on the scale (if present). You can use any commercially available household cleaning agent that is suitable for use on stainless steel.

**Suitable cleaning agents for the painted version:**

- standard soft brooms and hand brushes,
- compressed air,
- damp cloths, detergents, all-purpose cleaners for adhering dirt.

**Cleaning agents suitable for the stainless steel version:**

- Chlorine cleaner with max. 6 % chlorine content
- All-purpose cleaner
- Industrial cleaners

## **7 Storage and shipping**

### **7.1 Shipping conditions**

The packaging used for shipping your Minebea Intec equipment is optimally designed to prevent damage during transport. It is a good idea to save the box and all parts of the packaging for future storage or shipment of the equipment.

To prevent damage to the equipment, unplug all cables before packing the equipment for shipping.



## 8 Disposal

If the packaging is no longer required, please take it to your local waste disposal facility and/or a reputable disposal company or collection point. The packaging largely consists of environmentally friendly materials which can be used as secondary raw materials.

It is not permitted—even for small businesses—to dispose of this product with the regular household waste or at collection points run by local public waste disposal companies.

EU legislation requires its Member States to collect electrical and electronic equipment and dispose of it separately from other unsorted municipal waste so that it can then be recycled.

Before disposing of or scrapping the product, any batteries should be removed and taken to a suitable collection point.

Please see our T&Cs for further information.

We reserve the right not to accept products that are contaminated with hazardous substances (ABC contamination) for repair.

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