

# XA 4Y.F Analytical Balances

Excellent quality and accuracy of determining filters absorption capabilities during differential mass measurement





XA 4Y.F can be used as a standard balance



Large filters weighing



Weighing pan for large filters

#### **Functions**



counting

Dosing

Checkweighing

Formulations

Percent weighing

Statistics

Animal weighing

Differential weighing

Filters weighing

Statistical quality controli



Autotest



Density determination

Cooperation with titrators



Ambient conditions measurement



GLP procedures



Proximity sensors



Replaceable unit



Multilingual menu

# **Features**

#### The Most Precise Control over Filters Absorption Capabilities

Professional weighing pan featuring an additional draft-shield made of glass enables accurate measurement of large-size filters.

# 2 in 1 Functionality

XA 4Y.F balances have been designed to carry out filter weighing, however they are equipped with standard weighing pan for universal mass measurements.

# **Innovative 2-Point Adjustment**

The unique 2-point adjustment system guarantees the best accuracy of the weighing results and minimizes linearity errors thus ensuring reliable measurements within the whole measuring range.

#### Significantly Fast Measurement

Powerful processor offers new possibilities of operation assuring short indication stabilization time at a respective repeatability.

# **Intuitive Operation and Touch Screen**

5.7" colour touch screen enables intuitive operation and easy access to numerous applications and functions of the weighing instrument.

# **Automatic Control of the Level**

Levelling system facilitates adjustment of device level, it also uninterruptedly controls the level state, and informs about potential level deviations.

# **Spacious Weighing Chamber**

Large weighing chamber enables convenient operation using laboratory vessels of different dimensions.

#### **Numerous Options of Data Management**

Extensive storage capacity allows record of all measurement data in a form of complex reports and statistical graphs.

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# **Technical Specifications**

	XA 52 4Y.F	XA 110 4Y.F
Maximum capacity [Max]	52 g	110 g
Minimum load	1 mg	1 mg
Readability [d]	0.01 mg	0.01 mg
Verification scale interval [e]	1 mg	1 mg
Tare range	−52 g	–110 g
Repeatability*	0.01 mg (for concentrated mass) 0.03 mg (for filters)	0.012 mg (for concentrated mass) 0.03 mg (for filters)
Linearity	±0.03 mg	±0.07 mg
Eccentric load deviation	0.03 mg	0.07 mg
Sensitivity temperature drift**	1 × 10 <sup>-6</sup> / °C × Rt	1 × 10 <sup>-6</sup> / °C × Rt
Sensitivity time drift	1 × 10-6 / Year × Rt	1 × 10-6 / Year × Rt
Minimum weight (U=1%,k=2)	2 mg	3 mg
Minimum weight (USP)	20 mg	30 mg
Stabilization time	~ 5 s (30 s for filters)	~ 5 s (30 s for filters)
Adjustment	internal	internal
Moveable range	_	_
Verification	Yes	Yes
OIML Class	1	L
Indicator fastening	35 cm cable, wireless connection (option)***	35 cm cable, wireless connection (option)***
Display	5.7" colour, resistive touch screen	5.7" colour, resistive touch screen
Keypad	8 keys	8 keys
Protection class	IP 43	IP 43
Databases	19	19
Touch-free operation	2 programmable proximity sensors	2 programmable proximity sensors
USB-A	2	2
Ethernet	10 / 100 Mbit	10 / 100 Mbit
RS 232	2	2
Wireless connection	802.11 b/g/n	802.11 b/g/n
IN/OUT	$4 \times IN, 4 \times OUT$	$4 \times IN, 4 \times OUT$
Power supply	13.5 ÷ 16 V DC	13.5 ÷ 16 V DC
Power consumption	10 W	10 W
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C
Atmospheric humidity****	40 ÷ 80%	40 ÷ 80%
Transport and storage temperature	-20 ÷ +50 °C	-20 ÷ +50 °C
Weighing pan dimensions	210 × 254 mm (for filters), ø 90 mm open-work ø 85 mm standard (option)*****	210 × 254 mm (for filters), ø 90 mm open-work ø 85 mm standard (option)*****
Weighing chamber dimensions	160 × 270 × 346 mm	160 × 270 × 346 mm
Weighing device dimensions	542 × 285 × 346 mm	542 × 285 × 346 mm
Net weight	16.5 kg	16.5 kg
Gross weight	21 kg	21 kg
Packaging dimensions	820 × 460 × 625 mm	820 × 460 × 625 mm
Rt net weight		

Rt

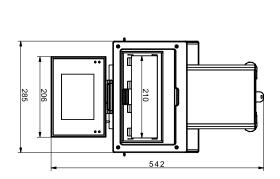
repeatability is expressed as a standard deviation from 10 weighing cycles parameter determined in the following temperature range: +15  $\div$  +35  $^{\circ}\text{C}$ 

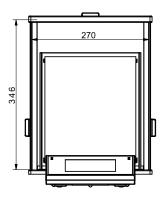
optional solution on purchase order

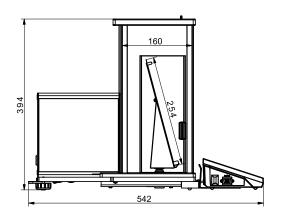
\*\*\* non-condensing conditions

ø 85 mm standard weighing pan on purchase order

Values of parameters provided in Technical Specifications table have been determined under stable laboratory conditions. Due to ambient conditions impact or/and balance setup, the table laboratory conditions are provided in Technical Specifications table have been determined under stable laboratory conditions. Due to ambient conditions impact or/and balance setup, the table laboratory conditions are provided in Technical Specifications table have been determined under stable laboratory conditions. Due to ambient conditions impact or/and balance setup, the table laboratory conditions are provided in Technical Specifications table have been determined under stable laboratory conditions. Due to ambient conditions impact or/and balance setup, the table laboratory conditions are provided in the table laboratory conditions. The table laboratory conditions are provided in the table laboratory conditions are provided in the table laboratory conditions. The table laboratory conditions are provided in the table laboratory conditions are provided in the table laboratory conditions. The table laboratory conditions are provided in the table laboratory conditions are provided in the table laboratory conditions. The table laboratory conditions are provided in the table labove parameters may vary for environments other than laboratory.







#### Accessories

#### **Weighing Tables**

- granite antivibration table
- antivibration tables for laboratory balances
- professional weighing table

#### **Professional weighing**

• KIT 85 density determination kit

#### **Ambient Conditions**

- DJ-05 anti-static ioniser
- •THB-Y ambient conditions module

#### **Peripheral Devices**

- Epson dot matrix printer
- barcode scanners
- WD-5/3Y LCD display

#### Cables, Converters

- P0108: RS 232 cable (balance-computer)
- P0167: RS 232 cable (balance-computer)
- P0151: RS 232 cable (balance Epson printer)

#### **Electrical Accessories**

• ZR-02 power supply with battery

# **Dedicated Software**

#### **Label Editor R02**

- designing label templates
- sending graphics and fonts to label printers
- printing label templates using connected printers

# R-LAB

- collecting measurements
- carrying out statistical analysis of measurements
- customized graphs and reports

#### **RADWAG Remote Desktop**

- remote operation via computer, mobile phone or tablet
- sending text messages
- version for Windows 10 and Android systems

# **Pipettes**

- determining measurement errors of pipettes volume
- accordance with ISO 8655
- calibration of single-channel and multi-channel pipettes
- calibration of fixed-volume and variable-volume pipettes

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