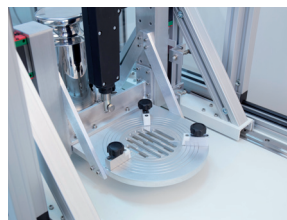


AKM-2 Automatic Mass Comparator

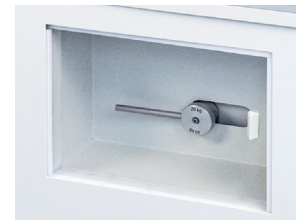
Class-leading automatic mass comparator



AKM-2



Positioners facilitating precise loading of weights



Knob for changing the weighing range



Stable construction of the table

Functions



Mass comparator



Ambient conditions measurement



Proximity sensors



Replaceable units



Multilingual menu

Features

Effective and Excellent Measurement

The AKM-2 automatic mass comparator enables determining mass deviations of weights with the minimum possible operator participation. The comparator allows to compare weights of class E1 and lower of mass ranging between 500 g and 50 kg. The device is available in 2-position version for 1 reference weight and 1 test weight.

Maximum Comfort of Operation

To ensure maximum comfort of operation, the mass comparator is equipped with automatic sliding feeder facilitating loading of large-mass weights.

Excellent Measurement Repeatability

The AKM-2 automatic mass comparator, due to the elimination of the human factor, temperature changes and air drafts, guarantees excellent measurement repeatability when compared to manual mass comparator.







Design and Functionality

Specially designed weighing pan enables precise and accurate comparison of the smallest weights. The knob for changing the weighing range allows to compare vast range of loads while maintaining the same resolution. Stable construction of the table with heavy granite stone and robust rubber shock absorbers minimizes the influence of vibrations.

Dedicated Software

Specially designed RMCS computer software enables comprehensive realisation of calibration procedures in laboratory. The system manages the whole calibration process, starting from the moment the order is placed, through procedure performance, to the moment of issuing the calibration certificate.

Technical Specifications

		AKM-2/10	AKM-2/20.1	AKM-2/20.5
OIML calibration range E1		2 kg ÷ 10 kg	5 kg ÷ 20 kg	5 kg ÷ 20 kg
OIML calibration range E2		500 g ÷ 10 kg	1 kg ÷ 20 kg	5 kg ÷ 20 kg
OIML calibration range F1		500 g ÷ 10 kg	1 kg ÷ 20 kg	5 kg ÷ 20 kg
OIML calibration range F2		500 g ÷ 10 kg	1 kg ÷ 20 kg	5 kg ÷ 20 kg
OIML calibration range M1		—	—	—
OIML calibration range M2		—	—	—
Maximum capacity [Max]		10.2 kg	20.5 kg	20,5 kg
Readability [d]		0.1 mg	0.1 mg	0.1 mg
Repeatability for nominal load*		0.2 mg (10 kg)	0.4 mg (20 kg)	0.4 mg (20 kg)
Repeatability for small load*		0.2 mg (500 g)	0.4 mg (1 kg)	0.4 mg (1 kg)
Stabilization time		30 s	30 s	30 s
Adjustment		external	external	external
Electric compensation range		– 100 g ÷ 200 g	± 500 g	± 500 g
Internal supplementary weights		semi-automatic	semi-automatic	semi-automatic
Eccentricity (for test weight)		0 mg	0 mg	0 mg
Magazine positions		2 positions	2 positions	2 positions
Display		5.7" colour resistive touch screen	5.7" colour resistive touch screen	5.7" colour resistive touch screen
Keypad		8 keys	8 keys	8 keys
Ingress protection - indicator		IP 43	IP 43	IP 43
Touch-free operation		2 programmable sensors	2 programmable sensors	2 programmable sensors
USB-A		2	2	2
Ethernet		10 / 100 Mbit	10 / 100 Mbit	10 / 100 Mbit
RS 232		2	2	2
Wireless Connection		802.11 b/g/n	802.11 b/g/n	802.11 b/g/n
IN/OUT		4 × IN, 4 × OUT	4 × IN, 4 × OUT	4 × IN, 4 × OUT
Power supply		110 ÷ 230 V AC / 50 ÷ 60 Hz	110 ÷ 230 V AC / 50 ÷ 60 Hz	110 ÷ 230 V AC / 50 ÷ 60 Hz
Operating temperature		+10 ÷ +30 °C	+10 ÷ +30 °C	+10 ÷ +30 °C
Operating temperature change rate		± 0.5 °C / 12 h (± 0.3 °C / 4 h)	± 0.5 °C / 12 h (± 0.3 °C / 4 h)	± 0.5 °C / 12 h (± 0.3 °C / 4 h)
Relative humidity variations		±2% / 12 h	±2% / 12 h	±2% / 12 h
Relative humidity***		40 ÷ 60%	40 ÷ 60%	40 ÷ 60%
Transport and storage temperature		–20 ÷ +50 °C	–20 ÷ +50 °C	–20 ÷ +50 °C
Weighing pan dimensions		ø 90 mm	ø 90 mm	ø 90 mm
Mass comparator dimensions**		1050 × 1280 × 750 mm	1050 × 1280 × 750 mm	1050 × 1280 × 750 mm
Indicator dimensions**		206 × 140 × 71 mm	206 × 140 × 71 mm	206 × 140 × 71 mm
Mass comparator net weight		330 kg	340 kg	340 kg
Mass comparator gross weight		455 kg	465 kg	465 kg
Mass comparator packaging dimensions**** (box pallet)		1050 × 800 × 1320 mm	1050 × 800 × 1320 mm	1050 × 800 × 1320 mm
Mass comparator packaging dimensions**** (mass comparator packaging)		1160 × 650 × 690 mm	1160 × 650 × 690 mm	1160 × 650 × 690 mm







* repeatability is expressed as a standard deviation determined for 6 ABBA cycles

** dimensions: length x width x height

*** non-condensing conditions

**** the shipment consists of two packages - box pallet (robot, stone, computer and frame for stone) and packaging with mass comparator (comparator + accessories)

AKM-2/50

OIML calibration range E1		20 kg ÷ 50 kg
OIML calibration range E2		5 kg ÷ 50 kg
OIML calibration range F1		5 kg ÷ 50 kg
OIML calibration range F2		5 kg ÷ 50 kg
OIML calibration range M1		—
OIML calibration range M2		—
Maximum capacity [Max]		51 kg
Readability [d]		1 mg
Repeatability for nominal load*		5 mg (50 kg)
Repeatability for small load*		2 mg (5 kg)
Stabilization time		30 s
Adjustment		external
Electric compensation range		0 g ÷ 50.5 kg
Internal supplementary weights		—
Eccentricity (for test weight)		0 mg
Magazine positions		—
Display		5.7" colour resistive touch screen
Keypad		8 keys
Ingress protection - indicator		IP 43
Touch-free operation		2 programmable sensors
USB-A		2
Ethernet		10 / 100 Mbit
RS 232		2
Wireless Connection		802.11 b/g/n
IN/OUT		4 × IN, 4 × OUT
Power supply		110 ÷ 230 V AC / 50 ÷ 60 Hz
Operating temperature		+10 ÷ +30 °C
Operating temperature change rate		± 0.5 °C / 12 h (± 0.3 °C / 4 h)
Relative humidity variations		±2% / 12 h
Relative humidity***		40 ÷ 60 %
Transport and storage temperature		−20 ÷ +50 °C
Weighing pan dimensions		ø 100 mm
Mass comparator dimensions**		1050 × 1280 × 750 mm
Indicator dimensions**		206 × 140 × 71 mm
Mass comparator net weight		380 kg
Mass comparator gross weight		505 kg
Mass comparator packaging dimensions**** (box pallet)		1050 × 800 × 1320 mm
Mass comparator packaging dimensions**** (mass comparator packaging)		1160 × 650 × 690 mm

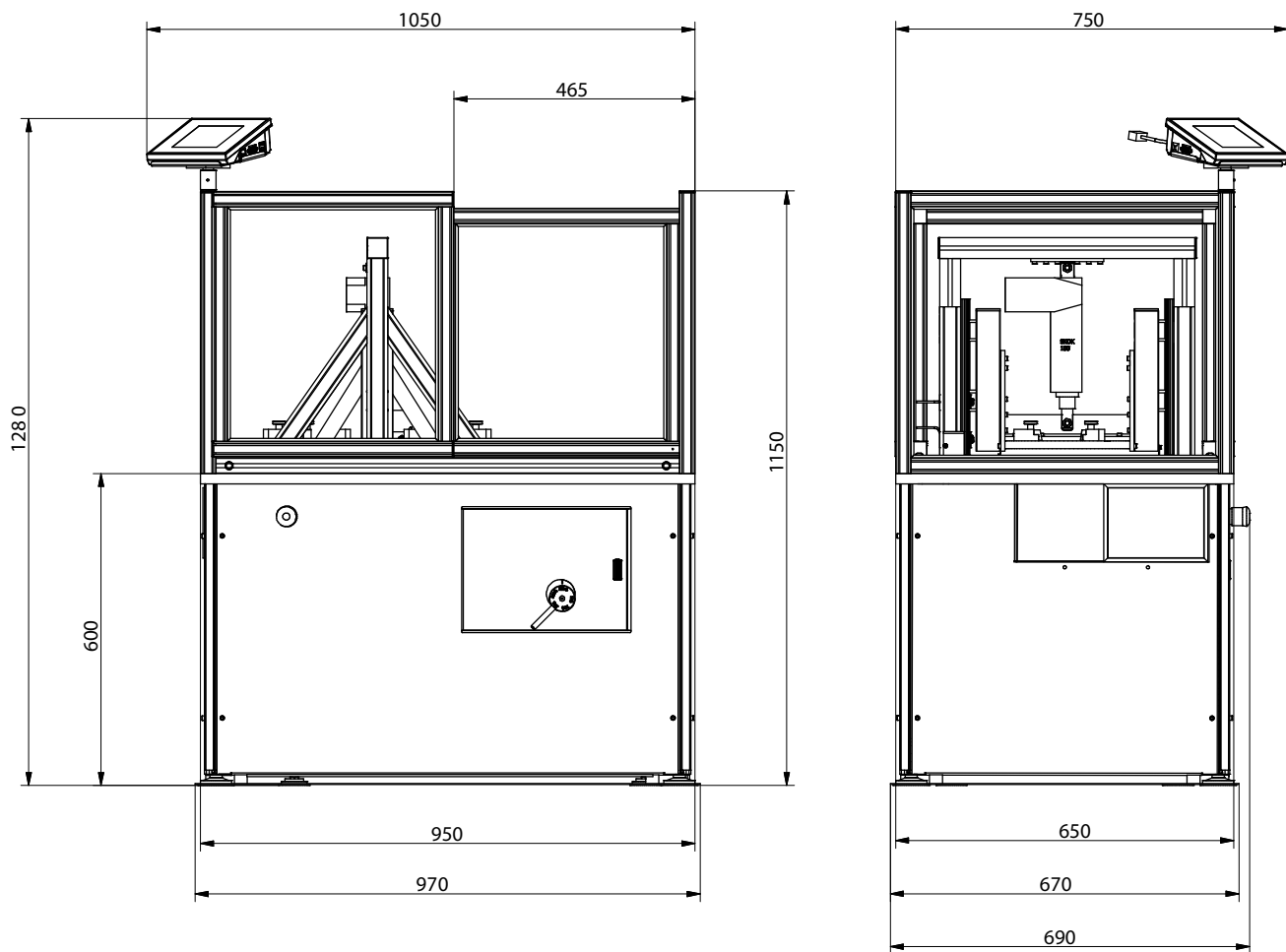
* repeatability is expressed as a standard deviation determined for 6 ABBA cycles

** dimensions: length x width x height

*** non-condensing conditions

**** the shipment consists of two packages - box pallet (robot, stone, computer and frame for stone) and packaging with mass comparator (comparator + accessories)

Dimensions



AKM-2

Accessories

Ambient Conditions

- THB-S or THB-P sensor

Peripheral Devices

- Epson dot matrix printer
- barcode scanner

Cables, Converters

- RS-232 – P0108 computer cable

- RS-232 – P0167 computer cable

- RS-232 – P0151 Epson printer cable

Electrical Accessories

- power supply with ZR-02 battery

Dedicated Software

RMCS System

- performance of calibration procedures in a laboratory from the moment the order is placed, to the moment of issuing a calibration certificate
- compatible with THB sensors enabling recording ambient conditions
- export of report results to various files
- archiving calibration protocols, orders, certificates and ambient conditions

RADWAG Remote Desktop

- remote control of the mass comparator using computer, telephone or tablet
- sending text messages
- version for Windows 10 and Android systems

R-LAB

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

Parameters Editor

- remote change of parameters
- remote on-line preview of the display
- displaying current mass indication
- software update
- file loading, editing and saving parameters to a file
- import and export of parameters
- interfaces: RS232, Ethernet and Wireless Connection
- quick and easy edition of balance parameters using computer