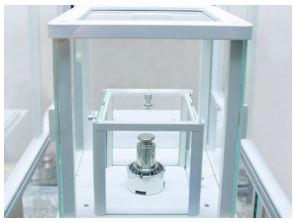
WAY 4Y.KO Mass Comparator

Class-leading manual mass comparator

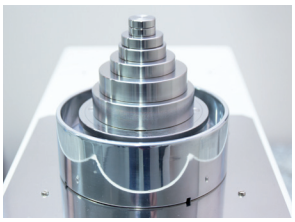
WAY 100.4Y.KO

WAY 500.4Y.KO

WAY 5.4Y.KO



Anti-draft chamber made of glass reduces the influence of air drafts on comparison procedure



External supplementary loads for comparison of non-standard weights

Functions

- Mass comparator
- Ambient conditions measurement
- Proximity sensors
- Replaceable units
- Multilingual menu

Features

Effective and Excellent Measurement
The WAY 4Y.KO series stands for a class-leading automatic mass comparator. The series enables comparison of weights ranging from 1 mg to 5 kg for class E1.

Excellent Measurement Repeatability
The WAY 4Y.KO mass comparator is equipped with a spacious weighing chamber made of glass and a ring-shaped draft shield. Mass comparators of higher accuracy feature an internal glass anti-draft chamber minimizing the influence of ambient conditions on measurement result.

Design and Functionality
The ring-shaped draft shield, apart from protecting the load against air drafts, prevents potential shocks that may occur during weighing pan loading. The weighing pan made of top-class non-magnetic stainless steel features marking facilitating centric loading of weights.

Anti-draft chamber made of glass reduces the influence of air drafts on comparison process. With use of conductive coating, the glass enables discharge of electrostatic charges.

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

	WAY 100.4Y.KO	WAY 500.4Y.KO	WAY 1.4Y.KO
OIML calibration range E1	5 g ÷ 100 g	200 g ÷ 500 g	500 g ÷ 1 kg
OIML calibration range E2	100 mg ÷ 100 g	10 g ÷ 500 g	100 g ÷ 1 kg
OIML calibration range F1	1 mg ÷ 100 g	1 g ÷ 500 g	10 g ÷ 1 kg
OIML calibration range F2	1 mg ÷ 100 g	1 g ÷ 500 g	1 g ÷ 1 kg
OIML calibration range M1	1 mg ÷ 100 g	1 g ÷ 500 g	1 g ÷ 1 kg
OIML calibration range M2	1 mg ÷ 100 g	1 g ÷ 500 g	1 g ÷ 1 kg
Maximum capacity [Max]	110 g	520 g	1.02 kg
Readability [d]	0,001 mg	0,01 mg	0.01 mg
Repeatability absolute *	0.005 mg (100 g)	0.04 mg (500 g)	0.05 mg (1000 g)
Repeatability nominal load *	0.0035 mg (100 g)	0.025 mg (500 g)	0.035 mg (1000 g)
Repeatability low load *	0.0025 mg (5 g)	0.015 mg (10 g)	0.025 mg (10 g)
Repeatability typical *	0.003 mg (100 g)	0.02 mg (500 g)	0.03 mg (1000 g)
Stabilization time	30 s	30 s	20 s
Adjustment	external	external	external
Electric compensation range	– 1 g ÷ 10 g	– 10 g ÷ 20 g	– 10 g ÷ 20 g
Internal supplementary weights	semi-automatic	semi-automatic	semi-automatic
External supplementary weights	10 g	30 g, 2 × 10 g	50 g, 30 g, 2 × 10 g
Eccentricity (for test weight)	1 d / 1 mm	1 d / 1 mm	1 d / 1 mm
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
Wi-Fi®	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	+15 ÷ +30 °C	+15 ÷ +30 °C	+15 ÷ +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	±3% / 4 h	±3% / 4 h	±3% / 4 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 30 mm	ø 50 mm	ø 60 mm
Mass comparator dimensions**	385 × 217 × 525 mm	385 × 217 × 525 mm	385 × 217 × 525 mm
Indicator dimensions**	206 × 140 × 71 mm	206 × 140 × 71 mm	206 × 140 × 71 mm
Anti-draft chamber dimensions**	560 × 565 × 340 mm	560 × 565 × 340 mm	560 × 565 × 340 mm
Mass comparator net weight	21,5 kg	22,5 kg	23 kg
Mass comparator gross weight	31,5 kg	35,5 kg	33 kg
Anti-draft chamber net weight	14 kg	14 kg	14 kg
Anti-draft chamber gross weight	24 kg	24 kg	24 kg
Mass comparator packaging dimensions**	860 × 750 × 570 mm	860 × 750 × 570 mm	860 × 750 × 570 mm
Anti-draft chamber packaging dimensions**	860 × 830 × 840 mm	860 × 830 × 840 mm	860 × 830 × 840 mm

* repeatability is expressed as a standard deviation determined for 6 ABBA cycles
** dimensions: length x width x depth
*** non-condensing conditions
Wi-Fi ® is a registered trademark of Wi-Fi Alliance.

	WAY 2.4Y.KO	WAY 5.4Y.KO
OIML calibration range E1	1 kg ÷ 2 kg	2 kg ÷ 5 kg
OIML calibration range E2	500 g ÷ 2 kg	500 g ÷ 5 kg
OIML calibration range F1	100 g ÷ 2 kg	100 g ÷ 5 kg
OIML calibration range F2	10 g ÷ 2 kg	10 g ÷ 5 kg
OIML calibration range M1	1 g ÷ 2 kg	1 g ÷ 5 kg
OIML calibration range M2	1 g ÷ 2 kg	1 g ÷ 5 kg
Maximum capacity [Max]	2.3 kg	5.05 kg
Readability [d]	0.1 mg	0.1 mg
Repeatability absolute *	0.2 mg (2000 g)	0.3 mg (5000 g)
Repeatability nominal load *	0.1 mg (2000 g)	0.2 mg (5000 g)
Repeatability low load *	0.08 mg (100 g)	0.15 mg (100 g)
Repeatability typical *	0.09 mg (2000 g)	0.15 mg (5000 g)
Stabilization time	20 s	20 s
Adjustment	external	external
Electric compensation range	–50 g ÷ 300 g	–10 g ÷ 50 g
Internal supplementary weights	semi-automatic	semi-automatic
External supplementary weights	2 × 100 g	500 g, 300 g, 100 g, 50 g, 30 g, 2 x 10g
Eccentricity (for test weight)	1 d / 1 mm	1 d / 1 mm
Display	5.7" colour resistive touch screen	5.7" colour resistive touch screen
Keypad	8 keys	8 keys
Ingress protection - indicator	IP 43	IP 43
Touch-free operation	2 programmable sensors	2 programmable sensors
USB-A	2	2
Ethernet	10 / 100 Mbit	10 / 100 Mbit
RS 232	2	2
Wi-Fi®	802.11 b/g/n	802.11 b/g/n
IN/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
Operating temperature	+15 ÷ +30 °C	+15 ÷ +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)
Relative humidity variations	±3% / 4 h	±3% / 4 h
Relative humidity* **	40 ÷ 60%	40 ÷ 60%
Transport and storage temperature	–20 ÷ +50 °C	–20 ÷ +50 °C
Weighing pan dimensions	ø 70 mm	ø 90 mm
Mass comparator dimensions**	385 × 217 × 525 mm mm	385 × 217 × 345 mm
Indicator dimensions**	206 × 140 × 71 mm	206 × 140 × 71 mm
Anti-draft chamber dimensions**	560 × 565 × 340 mm	560 × 565 × 340 mm
Mass comparator net weight	24.5 kg	24 kg
Mass comparator gross weight	34.5 kg	34 kg
Anti-draft chamber net weight	14 kg	14 kg
Anti-draft chamber gross weight	24 kg	24 kg
Mass comparator packaging dimensions**	860 × 750 × 570 mm	860 × 750 × 570 mm
Anti-draft chamber packaging dimensions**	860 × 830 × 840 mm	860 × 830 × 840 mm

* repeatability is expressed as a standard deviation determined for 6 ABBA cycles
** dimensions: length x width x depth
*** non-condensing conditions
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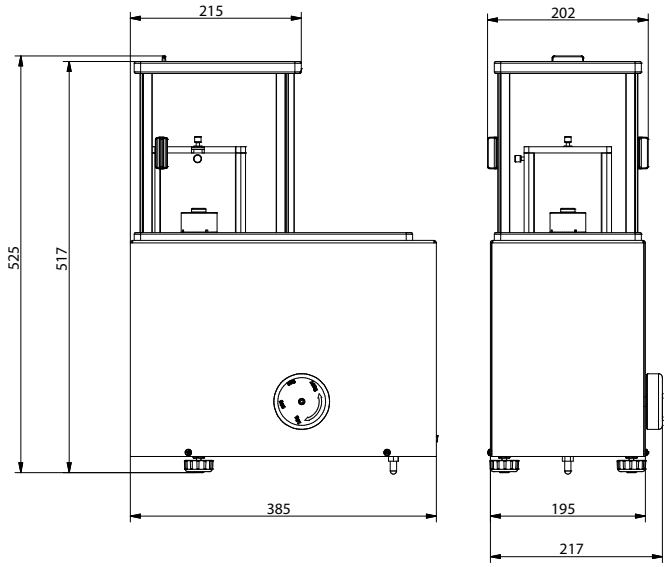
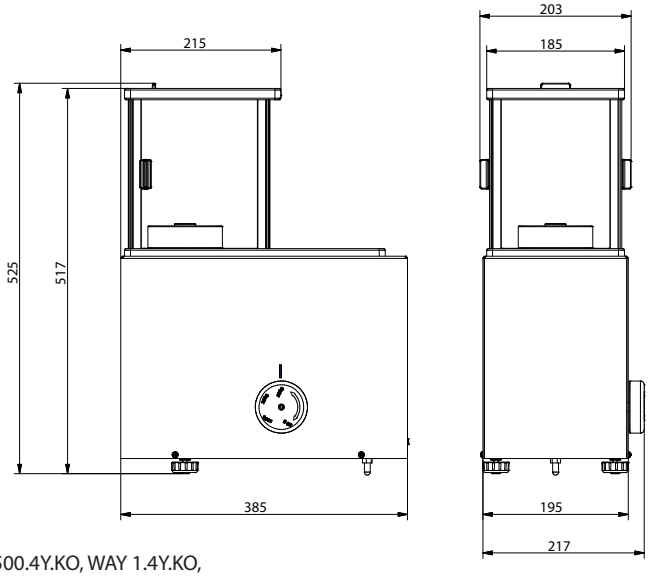
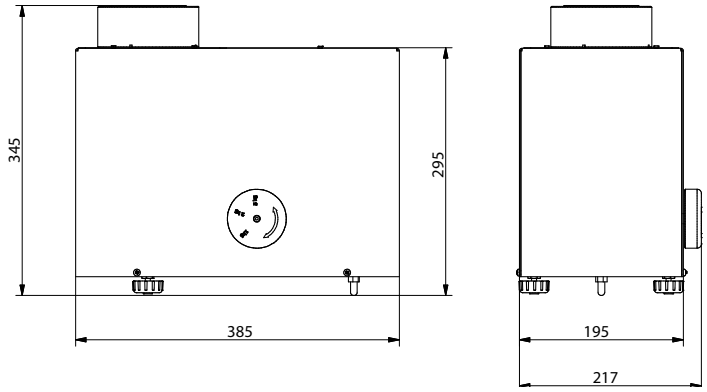
Dimensions



WAY 100.4Y.KO



WAY 500.4Y.KO, WAY 1.4Y.KO,
WAY 2.4Y.KO



WAY 5.4Y.KO

Accessories

Weighing Tables
- granite anti-vibration table

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