MASS COMPARATOR APP 4Y.KO

CE OIML ISO 9001 CERTIFIED

APP 64.4Y.KO

The newest line of Mass Comparators enables adjusting mass standards and weights according to the OIML recommendations (R-111) from 100 g to 50 kg for E1 class and lower.

The mass comparators are used both for ensuring traceability of mass measurements, and verification of weights in accordance with the principles of legal metrology. Mass Comparators have gained recognition among Accredited Calibration Laboratories in many countries.

Mass comparators APP 4Y.KO series comprises two components. One of them holds the electronic module, and the other precise mechanical measuring system.

APP 64.4Y.KO comparator enables calibration of E2 (50kg) class weights and of lower classes weights. Full range of calibration is available, starting from 0 up to 64 kilograms.

High measuring accuracy is guaranteed by semi-automatic adjustment system with external mass standard. The weighing pan made of aluminum is covered with cork layer and features centering holders for the weights. The APP 4Y.KO series features a intuitive menu supporting a user in instrument operation.

Correct operation of the mass comparator requires applying a special anti-draft shield which comes standard with the instrument.

Technical specification:

	APP 10.4Y.KO	APP 30.4Y.KO	APP 64.4Y.KO
E1	5 kg ÷ 10 kg	20 kg	-
E2	1 kg ÷ 10 kg	10 kg ÷ 20 kg	50 kg
F1	100 g ÷ 10 kg	2 kg ÷ 20 kg	20 kg ÷ 50 kg
F2	100 g ÷ 10 kg	1 kg ÷ 20 kg	5 kg ÷ 50 kg
M1	100 g ÷ 10 kg	1 kg ÷ 20 kg	2 kg ÷ 50 kg
M2	100 g ÷ 10 kg	1 kg ÷ 20 kg	1 kg ÷ 50 kg
Max capacity [Max]	10,2 kg	30,5 kg	64 kg
Readability [d]	0,1 mg	1 mg	10 mg
* Repeatability at low load	0,5 mg (100 g)	2 mg (1 kg)	18 mg (1 kg)
* Repeatability at nominal load	0,5 mg (10 kg)	3 mg (30 kg)	18 mg (50 kg)
Eccentricity (tested load)	2 d / 1	2d / 1mm	2 d / 1
Electric compensation range	- 100 g ÷ + 200g	100 g ÷ 30,5 kg	0 ÷ 64 kg
Stabilization time	30 s	20 s	20 s
Adjustment	external	external	external
Supplementary weights internal	half automatic	half automatic	-
Supplementary weights external	300 g, 200 g	-	-
Ambient conditions			
Working temperature	(15 ÷ 30) °C	(15 ÷ 35) °C	(10 ÷ 40) °C
Working temperature change rate	± 0,5 °C / 12 h (± 0,3 °C / 4 h)	± 0,5 °C / 12 h	± 3,5 °C / 12 h
Atmospheric humidity	(40 ÷ 60) %	(30 ÷ 70) %	(30 ÷ 70) %
Atmospheric humidity change rate	± 3 % / 4 h	± 5 % / 4 h	± 10 % / 4 h
Dimensions			
Pan Size	ø 190 mm (ø 300 mm)	ø 220 mm (ø 300 mm)	ø 300 mm (ø 400 mm)
Weighing device dimensions	455 × 300 × 380 mm	455 × 290 × 205 mm	455 × 290 × 205 mm
Controling device dimensions	206 × 140 × 70 mm	206 × 140 × 70 mm	206 × 140 × 70 mm
Anti-draft chamber dimensions	660 × 440 × 680 mm	700 × 440 × 545 mm	660 × 470 × 700 mm
Net weight/gross weight	30 kg / 59 kg	30 kg / 34 kg	14,5 kg / 17 kg
Packaging size	1160 × 650 × 700 mm	1160 × 650 × 700 mm	1160 × 650 × 700 mm
Chamber packaging size	960 × 920 × 735 mm	960 × 825 × 730 mm	-

*) Repeatability is expressed as a standard deviation determined for 6 ABBA cycles. Standard deviation is experimentally determined under ambient conditions for calibration of E1 class mass standards specified in OIML R111 (Table C.1.) document.

Anti-vibration table for laboratory balances	Additional LCD display "WD-5/4Y"
Epson impact printer	PC USB keyboard
"Tare" or "Print" foot button	Antistatic cable PA1
"PW-WIN" computer software	PUE-7-32 wall mounting kit
"RAD-KEY" computer software	Barcode scanner
"RAD-CAL" computer software	Cable RS 232 (balance - computer) "P0108"
THB 3 ambient conditions module	Cable RS 232 (balance - Epson, Citizen printer) "P0151"
THB/R ambient conditions monitor	
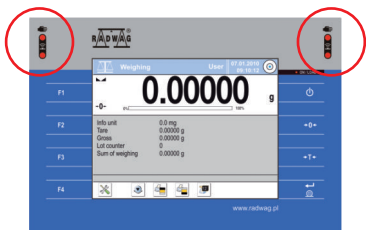
Infrared proximity sensors

Optional functions:
- PRINT function
- TARE function
- sensor's sensitivity
  adjustment

Data exchange through USB data storage device

- software update
- export weighing data
- export / import
  databases and settings

Communication interface

- Ethernet 10/100Mbps
- RS 232
- 2×USB 2.0
- 4×digital input / output
- Wireless Connection