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XA 310.5Y.A Analytical Balance, XA 110.5Y.A Analytical Balance, XA 82/220.5Y.A Analytical Balance, XA 210.5Y.A Analytical Balance, XA 120/250.5Y.A Analytical Balance, XA 220.5Y.A Analytical Balance, XA 52.5Y.A Analytical Balance, XA 520.5Y.A Analytical Balance

More information on the website
radwag.com/en/info,w1,N0J

XA 310.5Y.A Analytical Balance
XA 220.5Y.A Analytical Balance
XA 520.5Y.A Analytical Balance

XA 110.5Y.A Analytical Balance
XA 82/220.5Y.A Analytical Balance
XA 210.5Y.A Analytical Balance
XA 120/250.5Y.A Analytical Balance
XA 52.5Y.A Analytical Balance

Functions

- Autotest
- Dosing
- Percent Weighing
- Parts counting
- Peak hold
- Formulation
- Newton unit measurement
- Statistics
- Checkweighing
- IR sensors
- GLP Procedures
- Animal weighing
- Pipettes Calibration
- Air density correction
- Automatic sliding door
- Density determination
- Differential weighing
- Ambient conditions monitoring
- Statistical Quality Control
- Packaged Goods Control
- ALIBI Memory
- Wi-Fi

Datasheet

	XA 52.5Y.A Analytical Balance	XA 82/220.5Y.A Analytical Balance	XA 110.5Y.A Analytical Balance
Metrological parameters			
Maximum capacity [Max]	52 g	82 / 220 g	110 g
Minimum load	1 mg	1 mg	1 mg
Readability [d]	0,01 mg	0,01 / 0,1 mg	0,01 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-52 g	-220 g	-110 g
Standard repeatability [5% Max]	0,005 mg	0,005 mg	0,005 mg
Standard repeatability [Max]	0,01 mg	0,06 mg	0,02 mg
Standard minimum weight (USP)	10 mg	10 mg	10 mg
Standard minimum weight (U=1%, k=2)	1 mg	1 mg	1 mg
Permissible repeatability [5% Max]	0,012 mg	0,012 mg	0,012 mg
Permissible repeatability [Max]	0,02 mg	0,08 mg	0,03 mg
Linearity	±0,03 mg	±0,06 / 0,2 mg	±0,06 mg
Eccentric load deviation	0,03 mg	0,02 mg	0,06 mg
Sensitivity time drift	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt
Stabilization time	4 s	4 s	4 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	automatic - Reflex Level System	automatic - Reflex Level System	automatic - Reflex Level System
Display	10" touchscreen	10" touchscreen	10" touchscreen
Weighing chamber dimensions	170×200×220 mm	170×200×220 mm	170×200×220 mm
Weighing pan dimensions	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm
Packaging dimensions	435 x 885 x 540 mm	435 x 885 x 540 mm	435 x 885 x 540 mm
Net weight	14,7 kg	14,7 kg	14,7 kg
Gross weight	19,1 kg	19,1 kg	19,1 kg
Communication interface			
Communication interface	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
Environmental conditions			
Operating temperature	+10 — +40 °C	+10 — +40 °C	+10 — +40 °C
Operating temperature change rate	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
Relative humidity	20% — 80%	20% — 80%	20% — 80%
Relative humidity change rate	±1%/h (±4%/8h)	±1%/h (±4%/8h)	±1%/h (±4%/8h)

* The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 120/250.5Y.A Analytical Balance	XA 210.5Y.A Analytical Balance	XA 220.5Y.A Analytical Balance
Metrological parameters			
Maximum capacity [Max]	120 / 250 g	210 g	220 g
Minimum load	10 mg	1 mg	10 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg	0,1 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-250 g	-210 g	-220 g
Standard repeatability [5% Max]	0,005 mg	0,005 mg	0,05 mg
Standard repeatability [Max]	0,06 mg	0,025 mg	0,08 mg
Standard minimum weight (USP)	10 mg	10 mg	100 mg
Standard minimum weight (U=1%, k=2)	1 mg	1 mg	10 mg
Permissible repeatability [5% Max]	0,012 mg	0,012 mg	0,07 mg
Permissible repeatability [Max]	0,1 mg	0,035 mg	0,1 mg
Linearity	±0,06 / 0,2 mg	±0,1 mg	±0,2 mg
Eccentric load deviation	0,2 mg	0,1 mg	0,2 mg
Sensitivity time drift	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt
Stabilization time	4 s	4 s	1,3 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	automatic - Reflex Level System	automatic - Reflex Level System	automatic - Reflex Level System
Display	10" touchscreen	10" touchscreen	10" touchscreen
Weighing chamber dimensions	170×200×220 mm	170×200×220 mm	170×200×220 mm
Weighing pan dimensions	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm	ø100 mm
Packaging dimensions	435 x 885 x 540 mm	435 x 885 x 540 mm	435 x 885 x 540 mm
Net weight	14,7 kg	14,7 kg	14,7 kg
Gross weight	19,1 kg	19,1 kg	19,1 kg
Communication interface			
Communication interface	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
Environmental conditions			
Operating temperature	+10 — +40 °C	+10 — +40 °C	+10 — +40 °C
Operating temperature change rate	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
Relative humidity	20% — 80%	20% — 80%	20% — 80%
Relative humidity change rate	±1%/h (±4%/8h)	±1%/h (±4%/8h)	±1%/h (±4%/8h)

* The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Datasheet

	XA 310.5Y.A Analytical Balance	XA 520.5Y.A Analytical Balance
Metrological parameters		
Maximum capacity [Max]	310 g	520 g
Minimum load	10 mg	-
Readability [d]	0,1 mg	0,1 mg
Verification scale interval [e]	1 mg	-
Tare range	-310 g	-520 g
Standard repeatability [5% Max]	0,05 mg	0,07 mg
Standard repeatability [Max]	0,1 mg	0,18 mg
Standard minimum weight (USP)	100 mg	140 mg
Standard minimum weight (U=1%, k=2)	10 mg	14 mg
Permissible repeatability [5% Max]	0,07 mg	0,12 mg
Permissible repeatability [Max]	0,15 mg	0,25 mg
Linearity	±0,3 mg	±0,5 mg
Eccentric load deviation	0,3 mg	0,4 mg
Sensitivity time drift	1×10^{-6}/Year×Rt	1×10^{-6}/Year×Rt
Stabilization time	1,3 s	1,3 s
Adjustment	internal (automatic)	internal (automatic)
OIML Class	I	-
Physical parameters		
Leveling system	automatic - Reflex Level System	automatic - Reflex Level System
Display	10" touchscreen	10" touchscreen
Weighing chamber dimensions	170×200×220 mm	170×200×220 mm
Weighing pan dimensions	ø100 mm	ø100 mm
Packaging dimensions	435 x 885 x 540 mm	435 x 885 x 540 mm
Net weight	14,7 kg	14,7 kg
Gross weight	19,1 kg	19,1 kg
Communication interface		
Communication interface	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot	USB-A ×2, USB-C, HDMI, Ethernet, Wi-Fi, Hotspot
Electrical parameters		
Power supply	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*	Adapter: 100 – 240V AC 50/60Hz 1A; 15V DC 2,4A Balance: 12 – 15V DC 1,6A max*
Environmental conditions		
Operating temperature	+10 — +40 °C	+10 — +40 °C
Operating temperature change rate	±0,3°C/1h (±1°C/8h)	±0,3°C/1h (±1°C/8h)
Relative humidity	20% — 80%	20% — 80%
Relative humidity change rate	±1%/h (±4%/8h)	±1%/h (±4%/8h)

* The power supply can be connected to the socket on the back of the balance housing or to the terminal.

Accessories

Antivibration Tables

Holders for laboratory flasks

Barcode scanners
Density determination KIT
Professional weighing table
Holders for test tubes and filters
USB Hubs
Label Printers

THBR 2.0 System - Ambient Conditions Monitoring
Under-Pan Weighing Rack
Anti-Draft Chamber for XA 4Y and XA 5Y Balances
Fingerprint Reader
RS 232 – USB Converter
RS 232, RS 485 cables

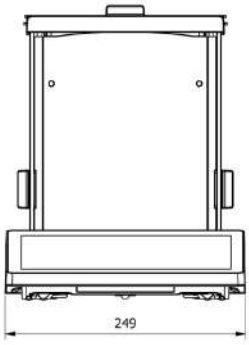
Software

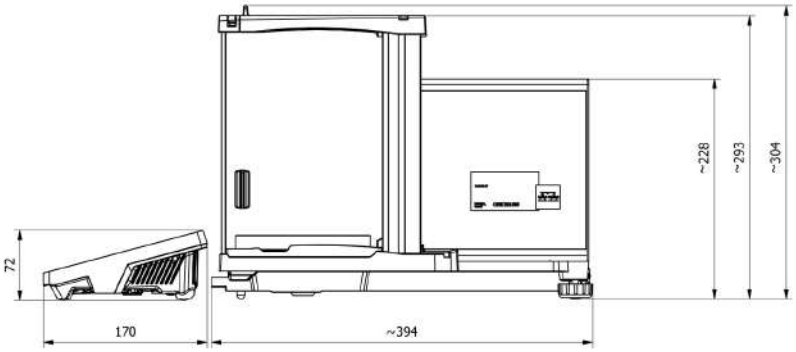
RAD-KEY
Label Editor R02
R-LAB
RADWAG Development Studio

LabVIEW Driver
RADWAG Remote Desktop
Scales Editor 2.1
R.Barcode

Device dimensions

XA 310.5Y.A Analytical Balance, XA 110.5Y.A Analytical Balance, XA 82/220.5Y.A Analytical Balance, XA 210.5Y.A Analytical Balance, XA 120/250.5Y.A Analytical Balance, XA 220.5Y.A Analytical Balance, XA 52.5Y.A Analytical Balance, XA 520.5Y.A Analytical Balance





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AS 520.X2 PLUS Analytical Balance, AS 82/220.X2 PLUS Analytical Balance, AS 160.X2 PLUS Analytical Balance, AS 120.X2 PLUS Analytical Balance, AS 60/220.X2 PLUS Analytical Balance, AS 62.X2 PLUS Analytical Balance, AS 220.X2 PLUS Analytical Balance, AS 310.X2 PLUS Analytical Balance

More information on the website
radwag.com/en/info,w1,9ON

AS 520.X2 PLUS Analytical Balance
AS 160.X2 PLUS Analytical Balance
AS 220.X2 PLUS Analytical Balance
AS 310.X2 PLUS Analytical Balance

AS 82/220.X2 PLUS Analytical Balance
AS 120.X2 PLUS Analytical Balance
AS 60/220.X2 PLUS Analytical Balance
AS 62.X2 PLUS Analytical Balance

Functions

- Autotest
- Dosing
- Percent Weighing
- Parts counting
- Peak hold
- Formulation
- Newton unit measurement
- Statistics
- Checkweighing
- IR sensors
- GLP Procedures
- Animal weighing
- Density determination
- Ambient conditions monitoring
- Replaceable unit
- Statistical Quality Control
- ALIBI Memory
- Mass for titrator
- Wi-Fi

Datasheet

	AS 60/220.X2 PLUS Analytical Balance	AS 62.X2 PLUS Analytical Balance	AS 82/220.X2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	60 / 220 g	62 g	82 / 220 g
Minimum load	1 mg	1 mg	1 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg	0,01 / 0,1 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-220 g	-62 g	-220 g
Standard repeatability [5% Max]	0,01 mg	0,01 mg	0,01 mg
Standard repeatability [Max]	0,06 mg	0,017 mg	0,06 mg
Standard minimum weight (USP)	20 mg	20 mg	20 mg
Standard minimum weight (U=1%, k=2)	2 mg	2 mg	2 mg
Permissible repeatability [5% Max]	0,02 mg	0,02 mg	0,02 mg
Permissible repeatability [Max]	0,1 mg	0,03 mg	0,1 mg
Linearity	±0,05/0,2 mg	±0,05 mg	±0,05/0,2 mg
Stabilization time	2 s	3 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Levelling system	manual	manual	manual
Display	–	–	–
Delivery components	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .
Weighing chamber dimensions	190×190×222 mm	190×190×222 mm	190×190×222 mm
Weighing pan dimensions	ø90 + ø85 (option) mm	ø90 open-work pan + ø85 (option) mm	ø90 + ø85 (option) mm
Packaging dimensions	550×455×565 mm	495×400×515 mm	550×455×565 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Features of use			
Database capacity	7	7	7
Touch-free operation	2 IR Sensors	2 IR Sensors	2 IR Sensors
Communication interface			
Communication interface	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet
Electrical parameters			
Power supply	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max
Power consumption max.	4 W	4 W	4 W
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Relative humidity	40% ÷ 80%	40% ÷ 80%	40% ÷ 80%

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

Datasheet

	AS 120.X2 PLUS Analytical Balance	AS 160.X2 PLUS Analytical Balance	AS 220.X2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	120 g	160 g	220 g
Minimum load	1 mg	10 mg	10 mg
Readability [d]	0,01 mg	0,1 mg	0,1 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-120 g	-160 g	-220 g
Standard repeatability [5% Max]	0,01 mg	0,06 mg	0,06 mg
Standard repeatability [Max]	0,025 mg	0,07 mg	0,07 mg
Standard minimum weight (USP)	20 mg	120 mg	120 mg
Standard minimum weight (U=1%, k=2)	2 mg	12 mg	12 mg
Permissible repeatability [5% Max]	0,02 mg	0,09 mg	0,09 mg
Permissible repeatability [Max]	0,04 mg	0,1 mg	0,1 mg
Linearity	±0,07 mg	±0,2 mg	±0,2 mg
Stabilization time	2 s	2 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Levelling system	manual	manual	manual
Display	–	–	–
Delivery components	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, bottom cover, power supply.
Weighing chamber dimensions	190×190×222 mm	190×190×222 mm	190×190×222 mm
Weighing pan dimensions	ø90 + ø85 (option) mm	ø100 mm	ø100 mm
Packaging dimensions	495×400×515 mm	495×400×515 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Features of use			
Database capacity	7	7	7
Touch-free operation	2 IR Sensors	2 IR Sensors	2 IR Sensors
Communication interface			
Communication interface	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet
Electrical parameters			
Power supply	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max
Power consumption max.	4 W	4 W	4 W
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C
Relative humidity	40% ÷ 80%	40% ÷ 80%	40% ÷ 80%

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

Datasheet

	AS 310.X2 PLUS Analytical Balance	AS 520.X2 PLUS Analytical Balance
Metrological parameters		
Maximum capacity [Max]	310 g	520 g
Minimum load	10 mg	- mg
Readability [d]	0,1 mg	0,1 mg
Verification scale interval [e]	1 mg	–
Tare range	-310 g	-520 g
Standard repeatability [5% Max]	0,07 mg	0,07 mg
Standard repeatability [Max]	0,1 mg	0,2 mg
Standard minimum weight (USP)	140 mg	140 mg
Standard minimum weight (U=1%, k=2)	14 mg	14 mg
Permissible repeatability [5% Max]	0,12 mg	0,12 mg
Permissible repeatability [Max]	0,15 mg	0,4 mg
Linearity	±0,2 mg	±0,6 mg
Stabilization time	2,5 s	2,5 s
Adjustment	internal (automatic)	internal (automatic)
OIML Class	I	I
Physical parameters		
Levelling system	manual	manual
Display	–	–
Delivery components	Balance, weighing pan, weighing pan shield, bottom cover, power supply.	Balance, weighing pan, weighing pan shield, bottom cover, power supply.
Weighing chamber dimensions	190×190×222 mm	190×190×222 mm
Weighing pan dimensions	ø100 mm	ø100 mm
Packaging dimensions	495×400×515 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg
Features of use		
Database capacity	7	7
Touch-free operation	2 IR Sensors	2 IR Sensors
Communication interface		
Communication interface	RS232, 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet	RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi, Ethernet
Electrical parameters		
Power supply	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max	Adapter: 100-240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,8A max
Power consumption max.	4 W	4 W
Environmental conditions		
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C
Relative humidity	40% ÷ 80%	40% ÷ 80%

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

* Wi-Fi® is a registered trademark of Wi-Fi® Alliance.

Accessories

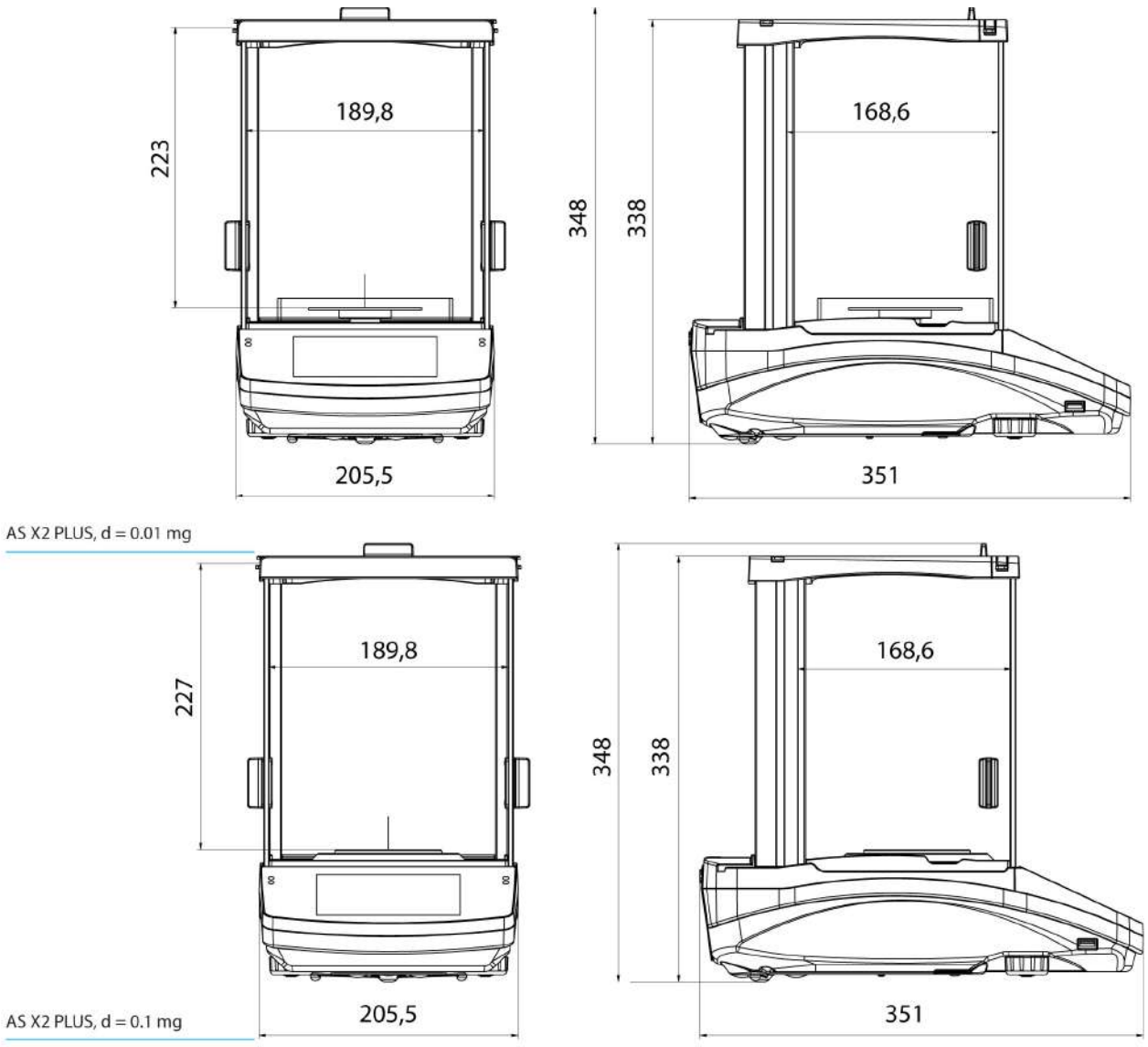
Antivibration Tables
Holders for laboratory flasks
Barcode scanners
Cigarette lighter receptacle power supply cables
Density determination KIT
USB cable (scale - printer)
Receipt Printer
Professional weighing table
Holders for test tubes and filters
Workstation for Pipettes Calibration
Displays
Protective cover for balances
Antistatic ionizer
RS 232, RS 485 cables
Under-Pan Weighing Rack
RS 232 cables (scale - printer)

Software

RAD-KEY
Alibi Reader
RADWAG Development Studio
R.Barcode
LabVIEW Driver
R-LAB
E2R System

Device dimensions

AS 520.X2 PLUS Analytical Balance, AS 82/220.X2 PLUS Analytical Balance, AS 160.X2 PLUS Analytical Balance, AS 120.X2 PLUS Analytical Balance, AS 60/220.X2 PLUS Analytical Balance, AS 62.X2 PLUS Analytical Balance, AS 220.X2 PLUS Analytical Balance, AS 310.X2 PLUS Analytical Balance



AS 310.R2 PLUS Analytical Balance, AS 62.R2 PLUS Analytical Balance, AS 520.R2 PLUS Analytical Balance, AS 60/220.R2 PLUS Analytical Balance, AS 160.R2 PLUS Analytical Balance, AS 82/220.R2 PLUS Analytical Balance, AS 110.R2 PLUS Analytical Balance, AS 120.R2 PLUS Analytical Balance, AS 220.R2 PLUS Analytical Balance

More information on the website
radwag.com/en/info,w1,NQ5

AS 310.R2 PLUS Analytical Balance
AS 520.R2 PLUS Analytical Balance
AS 160.R2 PLUS Analytical Balance
AS 110.R2 PLUS Analytical Balance
AS 220.R2 PLUS Analytical Balance

AS 62.R2 PLUS Analytical Balance
AS 60/220.R2 PLUS Analytical Balance
AS 82/220.R2 PLUS Analytical Balance
AS 120.R2 PLUS Analytical Balance

Functions

Autotest:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Dosing:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Percent Weighing:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Totalizing:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Parts counting:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Peak hold:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Newton unit measurement:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Statistics:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Checkweighing:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

GLP Procedures:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Animal weighing:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Density determination:
- AS 60/220.R2 PLUS Analytical Balance
- AS 82/220.R2 PLUS Analytical Balance
- AS 110.R2 PLUS Analytical Balance
- AS 160.R2 PLUS Analytical Balance
- AS 220.R2 PLUS Analytical Balance
- AS 310.R2 PLUS Analytical Balance
- AS 520.R2 PLUS Analytical Balance

Datasheet

	AS 60/220.R2 PLUS Analytical Balance	AS 62.R2 PLUS Analytical Balance	AS 82/220.R2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	60 / 220 g	62 g	82 / 220 g
Minimum load	1 mg	1 mg	1 mg
Readability [d]	0,01 / 0,1 mg	0,01 mg	0,01 / 0,1 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-220 g	-62 g	-220 g
Standard repeatability [5% Max]	0,012 mg	0,012 mg	0,012 mg
Standard repeatability [Max]	0,08 mg	0,02 mg	0,08 mg
Standard minimum weight (USP)	24 mg	24 mg	24 mg
Standard minimum weight (U=1%, k=2)	2,4 mg	2,4 mg	2,4 mg
Permissible repeatability [5% Max]	0,02 mg	0,02 mg	0,02 mg
Permissible repeatability [Max]	0,1 mg	0,035 mg	0,1 mg
Linearity	±0,05/0,2 mg	±0,05 mg	±0,05/0,2 mg
Stabilization time	2 s	2 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	manual	manual	manual
Display	LCD (backlit)	LCD (backlit)	LCD (backlit)
Protection class	IP 43	IP 43	IP 43
Delivery components	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .
Weighing pan dimensions	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm	ø90 + ø85 (option) mm
Packaging dimensions	550×455×565 mm	495×400×515 mm	550×455×565 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Communication interface			
Communication interface	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max
Power consumption max.	3 W	3 W	3 W
Overvoltage protection	–	–	–
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

Datasheet

	AS 110.R2 PLUS Analytical Balance	AS 120.R2 PLUS Analytical Balance	AS 160.R2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	110 g	120 g	160 g
Minimum load	10 mg	1 mg	10 mg
Readability [d]	0,1 mg	0,01 mg	0,1 mg
Verification scale interval [e]	1 mg	1 mg	1 mg
Tare range	-110 g	-120 g	-160 g
Standard repeatability [5% Max]	0,06 mg	0,012 mg	0,07 mg
Standard repeatability [Max]	0,08 mg	0,03 mg	0,08 mg
Standard minimum weight (USP)	120 mg	24 mg	140 mg
Standard minimum weight (U=1%, k=2)	12 mg	2,4 mg	14 mg
Permissible repeatability [5% Max]	0,09 mg	0,02 mg	0,09 mg
Permissible repeatability [Max]	0,1 mg	0,05 mg	0,1 mg
Linearity	±0,2 mg	±0,07 mg	±0,2 mg
Stabilization time	2 s	2 s	2 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	I
Physical parameters			
Leveling system	manual	manual	manual
Display	LCD (backlit)	LCD (backlit)	LCD (backlit)
Protection class	IP 43	IP 43	IP 43
Delivery components	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .	Balance, weighing pan, weighing pan shield, centring ring, bottom cover, power supply, fabric dust cover .
Weighing pan dimensions	ø100 mm	ø90 + ø85 (option) mm	ø100 mm
Packaging dimensions	495×400×515 mm	495×400×515 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Communication interface			
Communication interface	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max
Power consumption max.	3 W	3 W	3 W
Overvoltage protection	–	–	YES
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

Datasheet

	AS 220.R2 PLUS Analytical Balance	AS 310.R2 PLUS Analytical Balance	AS 520.R2 PLUS Analytical Balance
Metrological parameters			
Maximum capacity [Max]	220 g	310 g	520 g
Minimum load	10 mg	10 mg	-
Readability [d]	0,1 mg	0,1 mg	0,1 mg
Verification scale interval [e]	1 mg	1 mg	-
Tare range	-220 g	-310 g	-520 g
Standard repeatability [5% Max]	0,07 mg	0,08 mg	0,08 mg
Standard repeatability [Max]	0,08 mg	0,12 mg	0,25 mg
Standard minimum weight (USP)	140 mg	160 mg	160 mg
Standard minimum weight (U=1%, k=2)	14 mg	16 mg	16 mg
Permissible repeatability [5% Max]	0,09 mg	0,12 mg	0,12 mg
Permissible repeatability [Max]	0,1 mg	0,15 mg	0,4 mg
Linearity	±0,2 mg	±0,2 mg	±0,6 mg
Stabilization time	2 s	2,5 s	2,5 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)
OIML Class	I	I	-
Physical parameters			
Leveling system	manual	manual	manual
Display	LCD (backlit)	LCD (backlit)	LCD (backlit)
Protection class	IP 43	IP 43	IP 43
Delivery components	Balance, weighing pan, weighing pan shield, bottom cover, power supply.	Balance, weighing pan, weighing pan shield, bottom cover, power supply.	Balance, weighing pan, weighing pan shield, bottom cover, power supply.
Weighing pan dimensions	ø100 mm	ø100 mm	ø100 mm
Packaging dimensions	495×400×515 mm	495×400×515 mm	495×400×515 mm
Net weight	7,3 kg	7,3 kg	7,3 kg
Gross weight	9,3 kg	9,3 kg	9,3 kg
Communication interface			
Communication interface	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)	2×RS232[1], 2×USB-A (interchangeable), USB-B, Wi-Fi (option)
Electrical parameters			
Power supply	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max	Adapter: 100 – 240V AC 50/60Hz 0,6A; 12V DC 1,2A Balance: 12 – 15V DC 0,4A max
Power consumption max.	3 W	3 W	3 W
Overvoltage protection	–	–	–
Environmental conditions			
Operating temperature	+10 ÷ +40 °C	+10 ÷ +40 °C	+10 ÷ +40 °C

Repeatability is expressed as a standard deviation from 10 weighing cycles. Stabilization time depends on the ambient conditions and the dynamics of weighing pan loading; specified for FAST profile. 1 Barcode scanners, available as weighing instrument accessory, communicate with the instrument via RS232 interface exclusively.

* Wi-Fi® is a registered trademark of Wi-Fi® Alliance.

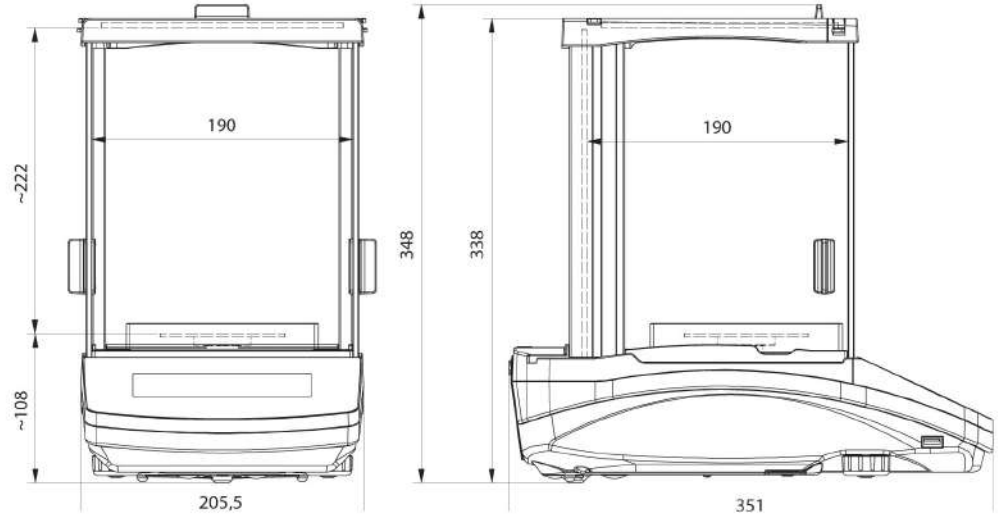
Accessories

Antivibration Tables
Holders for laboratory flasks
Barcode scanners
Cigarette lighter receptacle power supply cables
Density determination KIT
USB cable (scale - printer)
Receipt Printer
Professional weighing table
Holders for test tubes and filters
Workstation for Pipettes Calibration
Displays
Protective cover for balances
Weighing dishes
Antistatic ionizer
RPANEL BOX
RS 232, RS 485 cables
Under-Pan Weighing Rack
RS 232 cables (scale - printer)

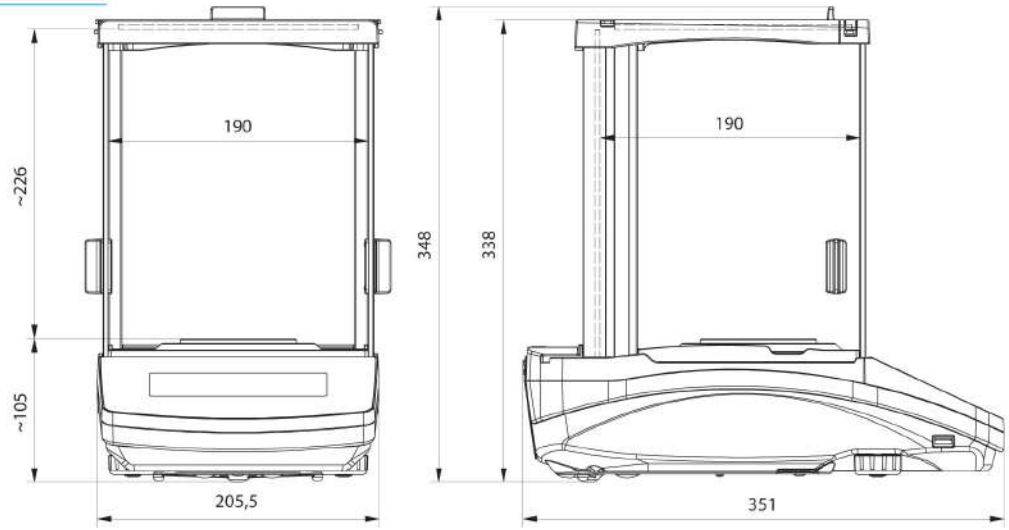
Software

RAD-KEY
R Panel
R-LAB
E2R System
LabVIEW Driver
Alibi Reader
RADWAG Development Studio
R.Barcode

Device dimensions



AS R2, d = 0.01 mg



AS R2, AS R1 d = 0.1 mg