



























GENERAL CATALOG



ICONS

The following symbols stand for the most important features and applications of Precisa scales and provide a fast overview of each product.

FEATURES

- | | |
|---|--|
|  Swiss made |  Swiss technology |
|  Liquid crystal display |  RS232 interface for PC / printer |
|  Backlit LCD |  USB device |
|  Backlit graphic LCD |  Communication options (USB host, bluetooth, wireless etc.) |
|  LC touch screen |  Support IQ/OQ/PQ |
|  Colour touch screen |  Anti-theft protection with password plus mechanical security |
|  Vacuum fluorescent display |  Direct tare and reference weight entry (manually) |
|  Self Linearization System |  Clock (printout GLP/GMP, auto-cal etc.) |
|  Fully automatic built-in self calibration system |  Below balance weighing |
|  Automatic calibration warning |  Easy alphanumeric input |
|  External calibration |  Internal calibration |
|  Touchless sensors to operate draft shield, tare, print, ... |  Ambient Observation System |
|  Electrostatic Cancellation System |  Optional evaporation trap for pipette calibration |

APPLICATIONS



- | | |
|--|---|
|  Units g, mg, ozt, lb, tael, etc. |  Statistics |
|  Percent weighing |  Recorder |
|  Piece counting |  Minimum sample weight |
|  Animal weighing |  Automatic repeatability test |
|  Density determination |  Multilevel backweighing |
|  Checkweighing |  Dynamic difference weighing |
|  Net total application: Add up summation (Dosing program) |  Pipette calibration, optionally with evaporation trap |
|  Free conversion Area conversion (Paper program) |  Buoyancy error suppression technology |
|  Maintenance Service Package | |

RANGE OF PRECISA BALANCES AND SCALES

Models with* are Dual Ranges

Models with ** are Floating Ranges

Models in *Italic*: Not EC type approved

-  Balances PRECISA
-  Scales PRECISA (Industrial)

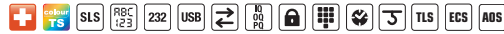
Readability

	0.01 mg SM	0.1 mg A	1 mg M	0.01 g C	0.1 g D	1 g G
100 g			BJ			
120 g		H_ EP ES LT LX LS XB [®]				
125 g	H_ H_** EP ES					
160 g			LT LS			
220 g		H_ EP ES LT LX LS XB [®] IM	BC			
225 g	H_ H_** EP ES*					
320 g		H_ EP ES LT LX LS	EP ES LT LX LS XB [®]	LT LS		
410 g				BJ		
420 g		EP ES IM	EP** ES**			
520 g		H_ EP ES				
610 g				BJ		
620 g			EP** ES** LT LX LS XB [®]	EP** ES** LT LX LS		
920 g			EP ES LT LX LS			
1200 g				EP ES LT LX LS BJ		
1220 g			EP ES LT LX LS IM	EP** ES**		
2100 g					BJ	
2200 g				EP ES LT LX LS XB [®] BJ		
2220 g			EP ES			
3200 g				LT LS XB [®] BC	EP** ES** LT LX LS XB [®]	
4100 g					BJ	
4200 g				EP ES LT LX LS XB [®]		
6100 g					BJ	BJ
6200 g				EP ES LT LX LS XB [®] IM	EP/EP** ES/ES** LT LX LS XB [®]	
8100 g					BJ	
8200 g				EP ES	EP/EP* EP/ES*	
10200 g					LT LX LS	LT LX LS
12100 g					IBK	BJ
12200 g					EP ES	EP ES
18100 g					IBK	
20100 g						IBK
24100 g					IBK	
30100 g						IBK
34100 g					IBK	IBK*/IBK**
40100 g						IBK
60100 g						IBK

Capacity

SEMI-MICRO BALANCES 0.01 mg

SERIES 390 HF

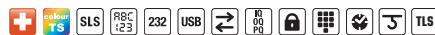


Optional



Model	Capacity	Readability	Repeatability (load > 50%)	Min. weight (1%, k = 2, load > 50%)	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
HF 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	Ø 80	1 / 1 mg	8 s	390-9104-009
HF 125SM-FR	61 g / 125 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9106-009
HF 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9107-009
HF 225SM-FR	61 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9108-009

SERIES 390 HA



ECS ADS Optional

Model	Capacity	Readability	Repeatability (load > 50%)	Min. weight (1%, k = 2, load > 50%)	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
HA 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	Ø 80	1 / 1 mg	8 s	390-9104-003
HA 125SM-FR	61 g / 125 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9106-003
HA 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9107-003
HA 225SM-FR	61 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9108-003

SERIES 390 HE



TLS ECS ADS Optional



Model	Capacity	Readability	Repeatability (load > 50%)	Min. weight (1%, k = 2, load > 50%)	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
HE 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	Ø 80	1 / 1 mg	8 s	390-9104-002
HE 125SM-FR	61 g / 125 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9106-002
HE 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9107-002
HE 225SM-FR	61 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9108-002

SERIES 390 HM



Optional

Model	Capacity	Readability	Repeatability (load > 50%)	Min. weight (1%, k = 2, load > 50%)	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
HM 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	Ø 80	1 / 1 mg	8 s	390-9104-001
HM 125SM-FR	61 g / 125 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9106-001
HM 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9107-001
HM 225SM-FR	61 g / 225 g	0.01 mg / 0.1 mg	0.010 mg / 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	Ø 80	1 / 1 mg	8 / 2 s	390-9108-001

* USP Min. weight (0.1%, k=2, load > 50%) = Min. weight x 10

SEMI-MICRO & ANALYTICAL BALANCES 0.01 - 0.1 mg

Options	HF	HA	HE	HM
Initially verified according to 2014/31/EU by Precisa, available for balances with EC (OIML) type approval	350-8930	350-8930	350-8930	350-8930
TLS Touchless sensors to operate draft shield, tare, print, ...	✓	✓	350-8047	-
ECS Electrostatic Cancellation System & AOS Ambient Observation System all-round care package	✓	390-8500-000	390-8500-000	-
ECS Electrostatic Cancellation System	✓	390-8500-001	390-8500-001	-
AOS Ambient Observation System	✓	390-8500-002	390-8500-002	-
Extension cable Ethernet only	390-8501-001	390-8501-001	390-8501-001	390-8501-001
Extension cable USB host (type A) only	390-8501-002	390-8501-002	390-8501-002	390-8501-002
Extension cable USB device (type B) only	390-8501-003	390-8501-003	390-8501-003	390-8501-003
Extension cable USB host double (2 type A) only	390-8501-004	390-8501-004	390-8501-004	390-8501-004
Extension cable Ethernet + USB host (type A)	390-8501-021	390-8501-021	390-8501-021	390-8501-021
Extension cable Ethernet + USB device (type B)	390-8501-031	390-8501-031	390-8501-031	390-8501-031
Extension cable Ethernet + USB host double (2 type A)	390-8501-041	390-8501-041	390-8501-041	390-8501-041
Extension cable USB host (type A) + USB host (type A)	390-8501-022	390-8501-022	390-8501-022	390-8501-022
Extension cable USB host (type A) + USB device (type B)	390-8501-032	390-8501-032	390-8501-032	390-8501-032
Extension cable USB device (type B) + USB host double (2 type A)	390-8501-043	390-8501-043	390-8501-043	390-8501-043

Applications	HF	HA	HE	HM
Density determination	✓	✓	390-8609	390-8609
BEST Buoyancy error suppression technology	✓	✓	390-8611	390-8611

Accessories	HF	HA	HE	HM
Hook for weighing below the balance	350-8527	350-8527	350-8527	350-8527
Density kit, for 0.01mg and 0.1mg balances, container size: $\varnothing = 75\text{mm}$, $h = 100\text{mm}$	350-8719	350-8719	350-8719	350-8719
Density kit solids only (without glass body and hook), for 0.01mg and 0.1 mg balances, container size: $\varnothing = 75\text{mm}$, $h = 100\text{mm}$	350-8720	350-8720	350-8720	350-8720
Glass body for density determination of liquids, $V = 10\text{cm}^3$	350-7054	350-7054	350-7054	350-7054
Downholder for samples with $\rho < 1\text{g/cm}^3$	350-7194	350-7194	350-7194	350-7194
Evaporation trap for pipette calibration, for 0.01mg and 0.1mg balances	350-8717	350-8717	350-8717	350-8717
Adapter for Eppendorf evaporation trap, for 0.01mg and 0.1 mg balances	350-8718	350-8718	350-8718	350-8718

SEMI-MICRO & ANALYTICAL BALANCES 0.01 - 0.1 mg



TOUCHSCREEN



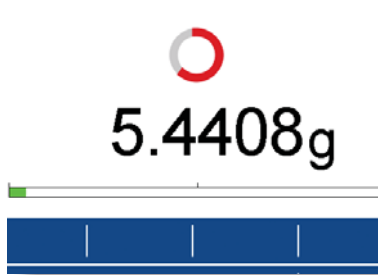
HELP



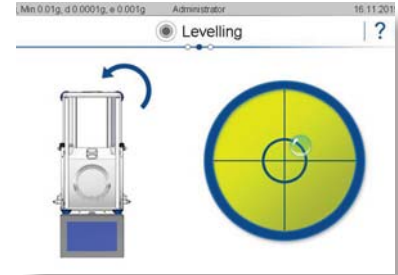
DRAFT SHIELD PERFECTION



SLS - SELF LINEARIZATION SYSTEM



STABILITY-INDICATOR VISUALLY PREDICTIVE



ELECTRONIC LEVELLING IMPROVES PRECISION



COMMUNICATION & INTERFACES



APPS



USER MANAGEMENT



TLS - TOUCHLESS SENSORS



ECS - ELECTROSTATIC CANCELLATION SYSTEM



AOS - AMBIENT OBSERVATION SYSTEM

SEMI-MICRO BALANCES 0.01 mg



SERIES 360 EP



Model	Capacity	Readability	Repeatability (load > 50%)	Min. weight (1%, k = 2, load > 50%)	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
EP 125SM	125 g	0.01 mg	0.02 mg	4.0 mg*	0.03 mg	Ø 80	1 / 1 mg	8 s	360-9100-001
EP 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.02 mg	4.0 mg*	0.03 / 0.1 mg	Ø 80	1 / 1 mg	8 s / 3 s	360-9101-001



SERIES 360 ES



Model	Capacity	Readability	Repeatability (load > 50%)	Min. weight (1%, k = 2, load > 50%)	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
ES 125SM	125 g	0.01 mg	0.02 mg	4.0 mg*	0.03 mg	Ø 80	1 / 1 mg	8 s	360-9102-001
ES 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.02 mg	4.0 mg*	0.03 / 0.1 mg	Ø 80	1 / 1 mg	8 s / 3 s	360-9103-001

* USP Min. weight (0.1%, k=2, load > 50%) = Min. weight x 10

SEMI-MICRO BALANCES 0.01 mg



360 EP: Sensor-controlled automatic draft shield; offers convenient hands-free operation on both sides



360 ES: Sophisticatedly designed draft shield; provides optimum draft suppression inside the weighing chamber

Options	360 EP	360 ES
Initially verified according to 2014/31/EU by Precisa, available for balances with EC/(OIML) type approval and SCS only	350-8679	350-8679
SCS (self calibration system) with clock, automatic on temperature change and real-time programmable	standard	standard

Accessories	360 EP	360 ES
Draft shield 360 automatic, height 26mm	standard	350-8657
Draft shield 360 manual, height 260 mm	350-8659	standard
Podest for draft shield 360	350-8678	350-8678
Draft shield 320 XB, height 260mm	350-8519	350-8519
Hook for weighing below the balance	350-8527	350-8527
Desk power adapter with EU plug, 80V - 240V, for balances with IP65 (protection against ingress of dust and low pressure water jets)	350-8372	350-8372
Density kit, for 0.01mg and 0.1mg balances, container size: $\varnothing = 75\text{mm}$, $h = 100\text{mm}$	350-8636	350-8636
Density kit solids only (without glass body and hook), for 0.01mg and 0.1mg balances, container size: $\varnothing = 75\text{mm}$, $h = 100\text{mm}$	350-8637	350-8637
Glass body for density determination of liquids, $V = 10\text{cm}^3$	350-7054	350-7054
Downholder for samples with $\rho < 1\text{g/cm}^3$	350-7194	350-7194
Evaporation trap for pipette calibration, for 0.01mg and 0.1mg balances	350-8633	350-8633
Adapter for Eppendorf evaporation trap, for 0.01mg and 0.1mg balances	350-8634	350-8634
Dust cover for the whole balance, set of 20 pieces	350-8676	350-8676

Slide-in Modules	360 EP	360 ES
PrecisaBUS converter, enables connection to almost all PrecisaBUS accessories	—	350-8664
USB host	350-8665	—
Ethernet wired	350-8666	—
Ethernet wireless	350-8667	—
Bluetooth	350-8668	—
PS/2 f & RS232 DB9 f	350-8670	—

Additional Accessories & Applications

- PrecisaBUS accessories, see Special Products on page 28/29
- SmartBox® applications, see Special Products on page 28/29
- Further accessories, see Special Products on page 28/29