HX5.EX-1 Platform Scale for Hazardous Areas

Speed and accuracy of the weighing process
and safety of the operation in gas hazardous areas

HX5.EX-1.C

HX5.EX-1.F

ATEX approval

Intrinsically safe communication interfaces and hermetic connectors in stainless steel housing

PUE HX5.EX-1 indicator with 5" colour graphic display

Functions

- Parts counting
- Percent weighing
- GLP procedures
- Labelling
- Replaceable units
- +/- control
- Statistics
- Alibi memory
- ATEX certificate
- Multilingual menu
- Dosing

Features

Weighing Accuracy in Industrial Conditions
HX5.EX-1 platform scale enables fast and precise mass measurements in industrial conditions.

Reliability and Safety
Robust design made of powder-coated steel for versatile weighing processes ensures safety of the operation in hazardous areas classified as zones 1 and 2.

Versatility of Use
HX5.EX-1 scale can be applied in various industry areas, apart from standard weighing processes it allows to carry out parts counting, checkweighing, labelling, dosing and statistics operations. This enables applying the scale in various industries.

Cooperation with PUE HX5.EX Indicator
The scale can be operated via advanced PUE HX5.EX indicator with a hermetic stainless steel housing. ATEX certificate guarantees safe operation of the indicator in hazardous areas.

Uncomplicated Operation and Clearly Presented Indications
5" colour screen ensures readability, and intuitive information arrangement on the display guarantees uncomplicated and comfortable operation. Graphic user interface features option of customization via widgets, this adds to comfort of operation.

Certified Intrinsically Safe Power Supply
The scale must be powered using exclusively a certified intrinsically safe power supply. Two versions of intrinsically safe power supply can be operated in both hazardous (PM01.EX-1 power supply) and safe areas (PM01.EX-2 power supply).

Cooperation with External Devices
With use of IM01.EX communication module it is possible to expand communication interfaces range. The module facilitates cooperation with various accessories, e.g. barcode scanners, printers, controlling/signalling devices.

Technical Specifications

	HX5.EX-1.1.5.F1	HX5.EX-1.3.F1	HX5.EX-1.6.F1*
Maximum capacity [Max]	1.5 kg	3 kg	6 kg
Minimum capacity	10 g	20 g	40 g
Readability [d]	0.5 g	1 g	2 g
Max readability for non-verified scale	0.2 g	0.2 g	0.2 g
Verification unit [e]	0.5 g	1 g	2 g
Tare range	–1.5 kg	–3 kg	–6 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X
EX marking	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb
Hazardous areas classification	zones 1 and 2	zones 1 and 2	zones 1 and 2
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	1 m cable	1 m cable	1 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 65	IP 65	IP 65
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	300 × 300 mm	300 × 300 mm	300 × 300 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	12.4 kg	12.4 kg	12.4 kg
Gross weight****	13.2 kg	13.2 kg	13.2 kg
Platform packaging dimensions	570 × 390 × 170 mm	570 × 390 × 170 mm	570 × 390 × 170 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument
** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)
*** non-condensing conditions
**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.15.F1*	HX5.EX-1.30.F1*	HX5.EX-1.15.C2
Maximum capacity [Max]	15 kg	30 kg	15 kg
Minimum capacity	100 g	200 g	100 g
Readability [d]	5 g	10 g	5 g
Max readability for non-verified scale	0.5 g	1 g	0.5 g
Verification unit [e]	5 g	10 g	5 g
Tare range	–15 kg	–30 kg	–15 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X
EX marking	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb
Hazardous areas classification	zones 1 and 2	zones 1 and 2	zones 1 and 2
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	1 m cable	1 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 65	IP 65	IP 65
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	300 × 300 mm	300 × 300 mm	400 × 500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	12.4 kg	12.4 kg	17.9 kg
Gross weight****	13.2 kg	13.2 kg	20.2 kg
Platform packaging dimensions	570 × 390 × 170 mm	570 × 390 × 170 mm	720 × 620 × 21 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument
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*** non-condensing conditions
**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.30.C2*	HX5.EX-1.60.C2*	HX5.EX-1.150.C2*
Maximum capacity [Max]	30 kg	60 kg	150 kg
Minimum capacity	200 g	400 g	1 kg
Readability [d]	10 g	20 g	50 g
Max readability for non-verified scale	1 g	2 g	5 g
Verification unit [e]	10 g	20 g	50 g
Tare range	–30 kg	–60 kg	–150 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X
EX marking	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb
Hazardous areas classification	zones 1 and 2	zones 1 and 2	zones 1 and 2
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 65	IP 65	IP 65
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	400 × 500 mm	400 × 500 mm	400 × 500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	17.9 kg	17.9 kg	17.9 kg
Gross weight****	20.2 kg	20.2 kg	20.2 kg
Platform packaging dimensions	720 × 620 × 21 mm	720 × 620 × 21 mm	720 × 620 × 21 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument
** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)
*** non-condensing conditions
**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	HX5.EX-1.300.C2*	HX5.EX-1.15.C3	HX5.EX-1.30.C3*
Maximum capacity [Max]	300 kg	15 kg	30 kg
Minimum capacity	2 kg	100 g	200 g
Readability [d]	100 g	5 g	10 g
Max readability for non-verified scale	10 g	0.5 g	1 g
Verification unit [e]	100 g	5 g	10 g
Tare range	–300 kg	–15 kg	–30kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X
EX marking	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb
Hazardous areas classification	zones 1 and 2	zones 1 and 2	zones 1 and 2
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 65	IP 65	IP 65
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	400 × 500 mm	700 × 500 mm	700 × 500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	17.9 kg	28.7 kg	28.7 kg
Gross weight****	20.2 kg	32.7 kg	32.7 kg
Platform packaging dimensions	720 × 620 × 21 mm	850 × 800 × 270 mm	850 × 800 × 270 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument
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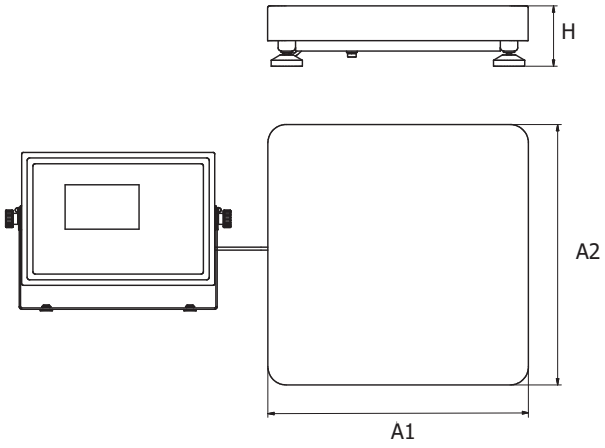
*** non-condensing conditions
**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

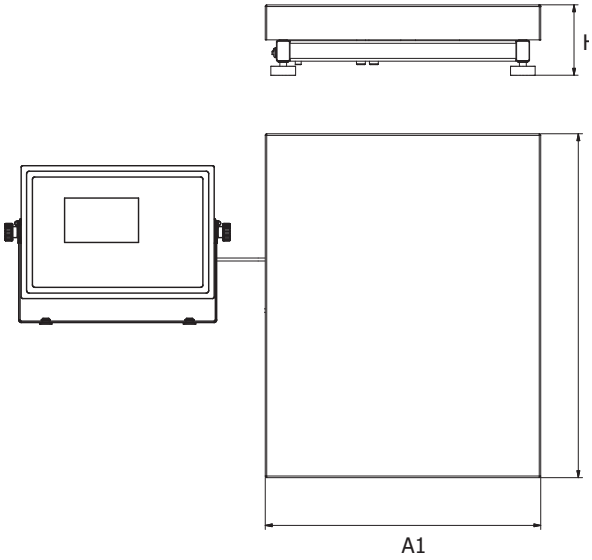
	HX5.EX-1.60.C3*	HX5.EX-1.150.C3*	HX5.EX-1.300.C3*
Maximum capacity [Max]	60 kg	150 kg	300 kg
Minimum capacity	400 g	1 kg	2 kg
Readability [d]	20 g	50 g	100 g
Max readability for non-verified scale	2 g	5 g	10 g
Verification unit [e]	20 g	50 g	100 g
Tare range	–60 kg	–150 kg	–300 kg
Verification	Yes	Yes	Yes
OIML class	III	III	III
EX approval	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X	ATEX : KDB 17ATEX0066X IECEX: IECEx OBAC 19.0001X
EX marking	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb	II 2G Ex ib IIB T4 Gb
Hazardous areas classification	zones 1 and 2	zones 1 and 2	zones 1 and 2
Platform material	St3S powder-coated steel	St3S powder-coated steel	St3S powder-coated steel
Weighing pan material	AISI304 stainless steel	AISI304 stainless steel	AISI304 stainless steel
Indicator fastening	2.5 m cable	2.5 m cable	2.5 m cable
Display	5" graphic display	5" graphic display	5" graphic display
Keyboard	membrane, 35 keys	membrane, 35 keys	membrane, 35 keys
Indicator	PUE HX5.EX-1	PUE HX5.EX-1	PUE HX5.EX-1
Ingress protection - platform	IP 65	IP 65	IP 65
Ingress protection - indicator	IP 66/68	IP 66/68	IP 66/68
RS 232	2	2	2
RS 485	1	1	1
Power supply**	230V AC	230V AC	230V AC
Power consumption	15 W	15 W	15 W
Operating temperature	–10 ÷ +40 °C	–10 ÷ +40 °C	–10 ÷ +40 °C
Relative humidity ***	10 ÷ 85%	10 ÷ 85%	10 ÷ 85%
Transport and storage temperature	–10 ÷ +50 °C	–10 ÷ +50 °C	–10 ÷ +50 °C
Weighing pan dimensions	700 × 500 mm	700 × 500 mm	700 × 500 mm
Indicator dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight****	28.7 kg	28.7 kg	28.7 kg
Gross weight****	32.7 kg	32.7 kg	32.7 kg
Platform packaging dimensions	850 × 800 × 270 mm	850 × 800 × 270 mm	850 × 800 × 270 mm
Indicator packaging dimensions	630 × 310 × 210 mm	630 × 310 × 210 mm	630 × 310 × 210 mm

* option: dual range weighing instrument
** The scale must be powered using dedicated PM01EX-1 power supply (intended for operation in hazardous area) or PM01EX-2 power supply (intended for operation in)
*** non-condensing conditions
**** mass given for the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

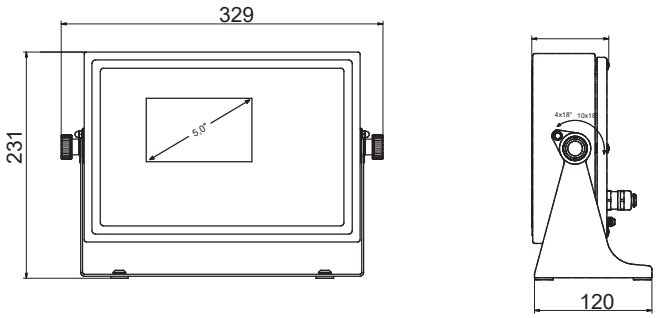
Dimensions



F1 Platform



C Platform



PUE HX5.EX-1

Scale type	A1	A2	H
HX5.EX-1.C1	400	500	103 ±3
HX5.EX-1.C3	500	700	130 ±3
HX5.EX-1.F1	300	300	70 ±3

dimensions in mm

Accessories

Peripheral Devices
- IM01EX-1 communication module

Electrical Accessories
- PM01.EX-1 power supply (for operation in hazardous area)
- PM01.EX-2 power supply (for operation in safe area)

Remaining accessories
- stands for indicators

Dedicated Software

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

E2R Weighing Records
- complete, automated databases synchronization
- fully supported processes of labelling and parts counting
- record of weighings, weighings archiving

Radwag Development Studio
- presentation of functions (and subfunctions) of communication protocol (Common Communication Protocol)
- possibility of connection with weighing equipment on which each function is carried out,
- library with mass control, contained within the development environment
- complete documentation of the communication protocol
- set of user manuals for different solutions addressed for programmers employed in companies using RADWAG-manufactured weighing equipment

RADWAG Connect
- establishing communication with all balances, scales and weighing modules using Common Communication Protocol
- communication via local network,
- support of basic functions
- auto searching for devices
- connecting with few devices simultaneously, swapping between them
- clear list of connected platforms
- record of measurements in the program,
- export of carried out measurements to CSV file,
- work performed using freely selected device with Windows 10 operating system

RAD KEY
- Establishing cooperation between a weighing instrument and a computer

R.Barcode
- The basic function software is presentation of the data sent by barcode scanners connected to PC via USB or RS232

LabView Driver
- operation of RADWAG balances in LabView environment