PUE HX5.EX Indicator

Weighing indicator intended for industry and designed to be used in hazardous areas
Compliant with ATEX directive

PUE HX5.EX

ATEX approval

Intrinsically safe interfaces and hermetic connectors in stainless steel housing

Functions

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

Features

Operation in Hazardous Area

PUE HX5.EX indicator is a device used to make multifunctional weighing instruments based on load cells. It is the latest RADWAG solution intended for hazardous areas and compliant with ATEX directive. Due to its mechanical design, the HX5.EX can be used in environment filled with explosive gases and dust. It can be operated in zones: 1/21 and 2/22.

Ergonomics and Comfort of Operation

The housing is made of AISI 304 stainless steel of IP 66/68 protection class. The indicator is equipped with a membrane keypad and 5" colour graphic display covered with polycarbonate that protects it against shocks. Hermetic, intrinsically safe interfaces connectors are located on the back side of the housing. Stable mount bracket enables mounting the indicator either on any flat horizontal surface or on the wall where its inclination angle can be easily adjusted. HX5.EX indicator is powered by intrinsically safe power supply that can be operated in both hazardous and safe areas

Certified Intrinsically Safe Power Supply

The indicator must be powered using exclusively a certified intrinsically safe power supply. Two versions of intrinsically safe power supply are offered, one for operation in hazardous area (PM01.EX-1 power supply), one in safe area (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.

Multifunctional Software

Indicator software allows carrying out processes such as weighing, parts counting, dosing, formulations and percent weighing. Information system is based on numerous databases: operators, products, weighings, packaging, formulations, customers. Alibi memory guarantees stored data safety.

Communication Interfaces

The interfaces enable cooperation between the indicator and the accessories intended for operation in hazardous and safe areas. Accessories: barcode scanners, printers, external displays, control buttons, light signalling towers and other controlling/signalling devices. The indicator can cooperate with systems for automatic process control and superior IT systems.

Technical Specifications

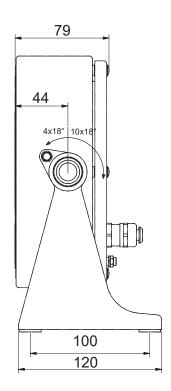|	PUE HX5.EX-1	PUE HX5.EX-2
Maximum quantity of verification units [e]	6000	6000
OIML class	III	III
Maximum signal gain	39 mV	39 mV
Maximum voltage per verification unit	3.25 µV	3.25 µV
Minimum voltage per verification unit	0.4 µV	0.4 µV
Minimum load cells impedance	80 Ω	80 Ω
Maximum load cells impedance	1200 Ω	1200 Ω
ATEX marking	II 2G Ex ib IIC T4 Gb II 2D Ex ib IIIC T60ºC Db	II 2G Ex ib IIC T4 Gb II 2D Ex ib IIIC T60ºC Db
Hazardous areas classification	zones 1 i 2 and 21 i 22	zones 1 i 2 and 21 i 22
Load cells wiring	4 or 6 wires + shield	4 or 6 wires + shield
Housing	AISI304 stainless steel	AISI304 stainless steel
Ingress protection	IP 66 / IP 68 (max 1.5 m immersion)	IP 66 / IP 68 (max 1.5 m immersion)
Display	5" graphic display	5" graphic display
Keypad	membrane	membrane
Keys quantity	35 keys	35 keys
RS 232	2	2
RS 485	1	1
IN/OUT	—	4 × IN, 4 × OUT
Power supply	100 ÷ 240 V AC 50 / 60 Hz intrinsically safe power supply	100 ÷ 240 V AC 50 / 60 Hz intrinsically safe power supply
Power consumption	15 W	15 W
Operating temperature	−10 ÷ +40 ℃	−10 ÷ +40 ℃
Relative humidity *	10 ÷ 80%	10 ÷ 80%
Transport and storage temperature	−10 ÷ +50 ℃	−10 ÷ +50 ℃
Overall dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight**	7.8 kg	7.8 kg
Gross weight**	8.8 kg	8.8 kg
Packaging dimensions	640 × 310 × 220 mm	640 × 310 × 220 mm

*   non-condensing conditions
**   mass of the packaging containing both PUE HX5.EX indicator and PM01.EX power supply

	PUE HX5.EX-3	PUE HX5.EX-4
Maximum quantity of verification units [e]	6000	6000
OIML class	III	III
Maximum signal gain	39 mV	39 mV
Maximum voltage per verification unit	3.25 µV	3.25 µV
Minimum voltage per verification unit	0.4 µV	0.4 µV
Minimum load cells impedance	80 Ω	80 Ω
Maximum load cells impedance	1200 Ω	1200 Ω
ATEX marking	II 2G Ex ib IIC T4 Gb II 2D Ex ib IIIC T60ºC Db	II 2G Ex ib IIC T4 Gb II 2D Ex ib IIIC T60ºC Db
Hazardous areas classification	zones 1 i 2 and 21 i 22	zones 1 i 2 and 21 i 22
Load cells wiring	4 or 6 wires + shield	4 or 6 wires + shield
Housing	AISI304 stainless steel	AISI304 stainless steel
Ingress protection	IP 66 / IP 68 (max 1.5 m immersion)	IP 66 / IP 68 (max 1.5 m immersion)
Display	5" graphic display	5" graphic display
Keypad	membrane	membrane
Keys quantity	35 keys	35 keys
RS 232	2	2
RS 485	1	1
IN/OUT	4 × IN	4 × OUT
Power supply	100 ÷ 240 V AC 50 / 60 Hz intrinsically safe power supply	100 ÷ 240 V AC 50 / 60 Hz intrinsically safe power supply
Power consumption	15 W	15 W
Operating temperature	−10 ÷ +40 ℃	−10 ÷ +40 ℃
Relative humidity *	10 ÷ 80%	10 ÷ 80%
Transport and storage temperature	−10 ÷ +50 ℃	−10 ÷ +50 ℃
Overall dimensions	329 × 231 × 120 mm	329 × 231 × 120 mm
Net weight**	7.8 kg	7.8 kg
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Dimensions

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