

Weighing systems WS 30/60 kg B/BL



- (!) Benefits
- Proven EMC weigh cell for maximum precision
- Large weighing range
- Easy integration in existing production lines
- Complete functionality of EWK electronics
- Protection class IP54, optional IP65

All Minebea Intec checkweighers boast outstanding product quality. They combine innovative technology with extreme precision.

The heavy-duty weighing systems WS 30/60 kg B/BL provide reliable weight and completeness checking in various industrial fields for products and goods up to 60 kg.

Application

Used in combination with an EWK 3010 or EWK 3015 TS operator terminal, the weighing systems reliably detect filling errors – checking against the Packaged Goods Regulation (AWC), for example. Incorrectly filled packages can then be separated out, sorted and/or transported elsewhere.

Technology

The measuring system uses the principle of electromagnetic force compensation, thereby offering maximum precision even for heavy loads. Depending on the design of the system, products can also be classified, and the sorting and/or signal equipment controlled.

The weighing systems WS 30/60 kg B/BL have an intuitive user interface, a number of different interfaces and can be easily integrated into any packaging line. The small diameter of the rollers ensures products are not jolted as they move over the weigher.

Advantages

- You can select the right weighing system for your requirements every time
- You benefit from maximum precision and the highest product quality
- The weighing systems are easy to use
- You can implement a complete production control programme
- You benefit from a large selection of optional additional functions

Details

- Connection via Ethernet TCP/IP to the 'SPC@Enterprise' QA network system
- Approved in many European countries for operation in line with the Packaged Goods Regulation (AWC)
- MID compliance as an automatic checkweigher and OIML certificate R51
- In standard BL series: operator terminal separate from weighing belt
- In B series: control cabinet with mounted operator terminal
- Weighing belt available in different dimensions to suit different products
- Reject product belts and line separators can be individually selected

Options

- Individual weight output
- Trend controller for packaging or filling machines
- DeviceNet, PROFIBUS, PROFINET
- Completeness checks with floating mean value
- Monitoring of compressed air, rejection, intervals and production
- 15" display with touchscreen (default 10" with keys)
- FDA 21 CFR Part 11
- USB Print option for electronic data transfer
- Filling spout statistics
- IP65 (default is IP54)

Technical specifications

Weighing systems WS 30/60 kg B/BL

Parameter	WS 30 kg		WS 60 kg	
Gross weighing range	Up to 30 kg		Up to 60 kg	
Smallest permissible calibration value	5 g (10 g) ¹		10 g (20 g) ¹	
Standard deviation attributable to measurement error (σ) (Depends on product, throughput and ambient conditions)	From 0.5 g		From 1.5 g	
Max. throughput ²	100 items/min		80 items/min	
Fixed speeds (m/s)	3x 380 V / 400 V / 415 V; 50 Hz 0,11; 0,14; 0,21; 0,23; 0,27; 0,29; 0,34; 0,39; 0,45; 0,53; 0,61; 0,66; 0,75; 0,80; 1,03		3x 380 V / 400 V / 415 V; 50 Hz 0,19; 0,22; 0,24; 0,26; 0,28; 0,30; 0,32; 0,34; 0,37; 0,40; 0,42; 0,45; 0,49; 0,53; 0,57; 0,61; 0,66; 0,71; 0,76; 0,82; 0,89; 0,96; 1,00; 1,08; 1,17; 1,26; 1,35; 1,48; 1,60	3x 440 V / 460 V / 480 V; 60 Hz 0,23; 0,29; 0,33; 0,36; 0,41; 0,45; 0,48; 0,51; 0,55; 0,59; 0,64; 0,69; 0,74; 0,79; 0,85; 0,91; 0,98; 1,07; 1,15; 1,20; 1,29; 1,41; 1,51; 1,62; 1,78; 1,92;

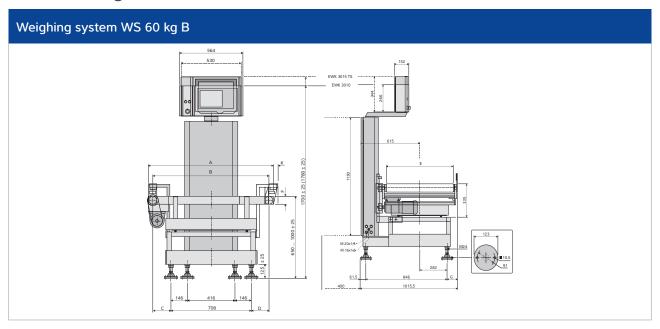
Parameter	WS 30 kg		WS 60 kg			
Speed ranges (m/s) with frequency converter Higher speeds on request. MID verifiable systems up to 3 m/s.	3x 230 V; 50 V 0,120,49 0,240,98 0,381,52 0,72,89		3x 230 V; 50 Hz 0,130,46 0,230,91 0,441,72 0,72,93			
Centre-to-centre distance of weighing belt B	600 mm	800 mm	1000 mm	1225 mm	1030 mm	1230 mm
Platform length A	660 mm	860 mm	1060 mm	1285 mm	1100 mm	1300 mm
Belt width E	400 mm	600 mm	500 mm	500 mm	700 mm	700 mm
Belt roller diameter F	60 mm	60 mm	60 mm	60 mm	70 mm	70 mm
Floor clearance	95 mm (±25) for BL and 125 (±25) for B			95 mm (±25) for BL and 125 (±25) for B		
Transport medium	Belt			Belt		
Drives	3 × 230/400 V _{AC} (+10%/-15%); 50 Hz (default), 60 Hz (optional); power output: 0.75 kW (default)					
Connected voltage	230 V _{AC} (+10%/-15%); 50/60 Hz (L1, N, PE)					
Power consumption	Approx. 1700 V _A			Approx. 1700 V _A		
Feed direction	Right to left or left to right (please indicate when ordering)					
Working height (depends on design)	Max. 535 mm to 1040 mm Leg adjustment range: ±25 mm		500 mm to 1000 mm Leg adjustment range: ±25 mm			
Permissible temperature range	+5°C to +40°C; for the product: -30°C to +80°C					
Cable length	5 m (default), max. 15 m (please indicate when ordering)					
Protection class	IP54 (default), IP65 (optional)					
Interfaces	Ethernet, fieldbus, RS422, RS232, current loop					
Machine safety	Design complies with the stipulations of EC Directive 2006/42/EC (Machinery)					
Dimensions	See technical diagrams, depends on application					
Weight	Approx. 260–350 kg		Approx. 300–350 kg			

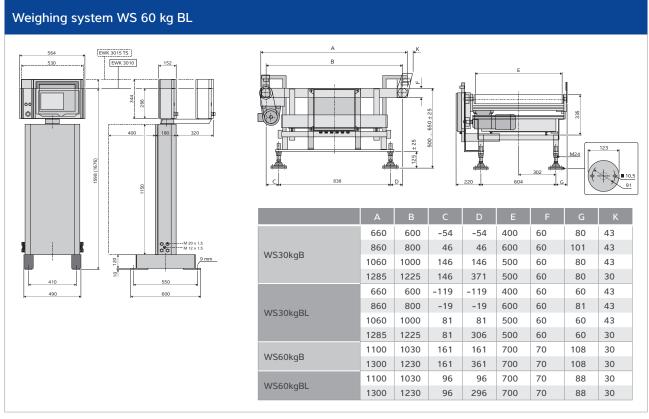
 $^{^1 \}mbox{for v} > \mbox{2.0 m/s} \quad ^2 \mbox{depends on product, permissible imprecision and ambient conditions}$

Indicator	Weighing syste	ms WS 30/6	50 kg B/BI
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Parameter	Description		
Control unit	Flat screen, 10.4" TFT colour display and keypad (EWK 3010)		
Housing	Stainless steel housing 1.4301, IP65 protection class		
Weight display	Choice of gross, net or differential weight		
Operational display	Distribution, yield, throughput, average value chart, large weight readout		
Operating modes	 Classifying weigher with Packaged Goods Regulation (AWC) evaluation 3-way sorting or 4 freely selectable class limits 3/5-way sorting 		
Additional standard functions	- Batch mode - 5-way classification - Time or path-based sorting - Automatic zero-setting - Statistics - Logging - Product data memory for 200 products - Inputs: Ignore weigher, event counter, external error message - Outputs: feeder/batch, 3/5-way sorting, total counter/ pre-selection counter, error message output	 Program-controlled belt speed Self-monitoring function, error reports Auxiliary functions: test package, dialogues for diagnostics and service Data stored in battery-backed memory Choice of languages for program dialogues, user-selected Connection to SPC systems 	
Options/advanced functions	- Belt speed with frequency converter (0.12 – 0.46 m/s; 0.23 – 0.91 m/s; 0.44 – 1.72 m/s) - Touchscreen 15" TFT colour display (EWK 3015) - Logging system with built-in printer (IP65)/ for external printer - Trend controller with display - Approved for use in legal metrology - Interface for individual weight value output for external evaluation and connection to customer systems - Fieldbus interfaces: PROFIBUS, PROFINET, DeviceNet - Data communication: Ethernet, TCP/IP, XML client/server, prepared for SPC@Enterprise and OPC DA server - FDA 21 CFR Part 11 - Minebea Intec ProControl@Remote - USB Print	- Completeness checks with floating mean value - 5 classifying outputs with pulse output or maintained output signals (e.g. for control of indicators or external counters) - Monitoring of average weight and repetitive rejections (with 3-way sorting only) - Automatic sampling - Volume evaluation - Measuring accuracy check - Package length and interval monitoring - Interval monitoring - Rejection monitoring of goods flow - Compressed air monitoring - Control of customer sorting equipment - EMERGENCY STOP button - Product flow monitoring - Digital lock	

Technical diagrams





All dimensions in mm

The products and solutions presented in this data sheet make major contributions in the following sectors:



The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.