

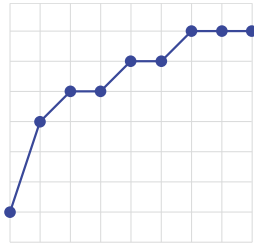
Designed for Automation

Compact Precision Weighing



Compact Design

Fully integrated electronics help to save space in the machine/instrument design. No additional unit is needed for communication. Weigh module can be integrated in machines/instruments with tightest space requirements.



Easy Configuration

A computer-based software for parameterization, diagnostics and data backup makes getting started easy. This allows the WKC weigh module to be customized for virtually any application.



Robust

Stainless steel housing and coated connection cable protect the weigh module against external physical and electromagnetic influences. This ensures reliability of weight values and extends the product life.



Quick Functionality Test

Thanks to the internal weight, it is possible to check correct functioning of the weigh module at any time, even with preloads. This saves time for calibration and reduces down-time.



WKC

Precision Weigh Modules

WKC weigh modules offer a compact and cost-effective solution for on-board weighing in automated applications where high resolution is needed.

A standard M12 connector and the fully integrated electronics minimize integration efforts, and enable an easy and quick installation.

The WKC product line offers the most economical way of high performance on-board weighing with minimized engineering efforts.

Model Specific Weighing Data

Type information	WKC204C	WKC603C	WKC6002C
Nominal capacity / nominal load	200 g	600 g	6000 g
Maximum capacity	220 g	620 g	6200 g
Maximum preload ^{M1)}	30 g	150 g	150 g
Maximum preload for internal adjustment	200 g	200 g	4600 g
Readability	0.1 mg	1 mg	10 mg
Internal adjustment	✓	✓	✓

Limit values ^{M2)}

Repeatability (σ) (@nominal load) \leq ^{M3)}	0.2 mg	1 mg	10 mg
Linearity deviation \leq	0.4 mg	2.5 mg	30 mg
Eccentric load deviation (@test load) \leq	1 mg (100 g)	4 mg (200 g)	50 mg (2000 g)
Sensitivity temperature drift \leq ^{M4)}	0.6 mg/°C	2 mg/°C	18 mg/°C

Typical values ^{M5)}

Settling time \leq	2 s	1.5 s	1 s
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Ambient conditions

Compensated temperature range ^{M6)}	10 °C to 30 °C (50 °F to 86 °F)
Operating temperature range	5 °C to 40 °C (41 °F to 104 °F)
Storage temperature range	-20 °C to 70 °C (-4 °F to 158 °F)
Relative air humidity range ^{M6)}	20 % to 80 %
Warm-up time after power-on ^{M6)}	30 minutes

^{M1)} Maximum preload on top of weighing pan to maintain maximum capacity.

^{M2)} Applicable for stationary conditions within compensated temperature and relative air humidity range.

^{M3)} σ = standard deviation (68% of weighing results within $\pm \sigma$).

^{M4)} Weighing tests according to OIML R76 A.5.3 at stationary conditions.

^{M5)} Applicable for stable environmental conditions and optimal filter settings.

^{M6)} Condition to meet the specified limit values.

General Data

Electrical connection

Power supply	12 - 24 V DC
Electrical connection	M12, 12 pins, A-coded, male
Communication interface	RS232, full-duplex, 2.4 to 38.4 kBaud RS422 full-duplex, 2.4 to 38.4 kBaud
Maximum weight update rate	92 values/s

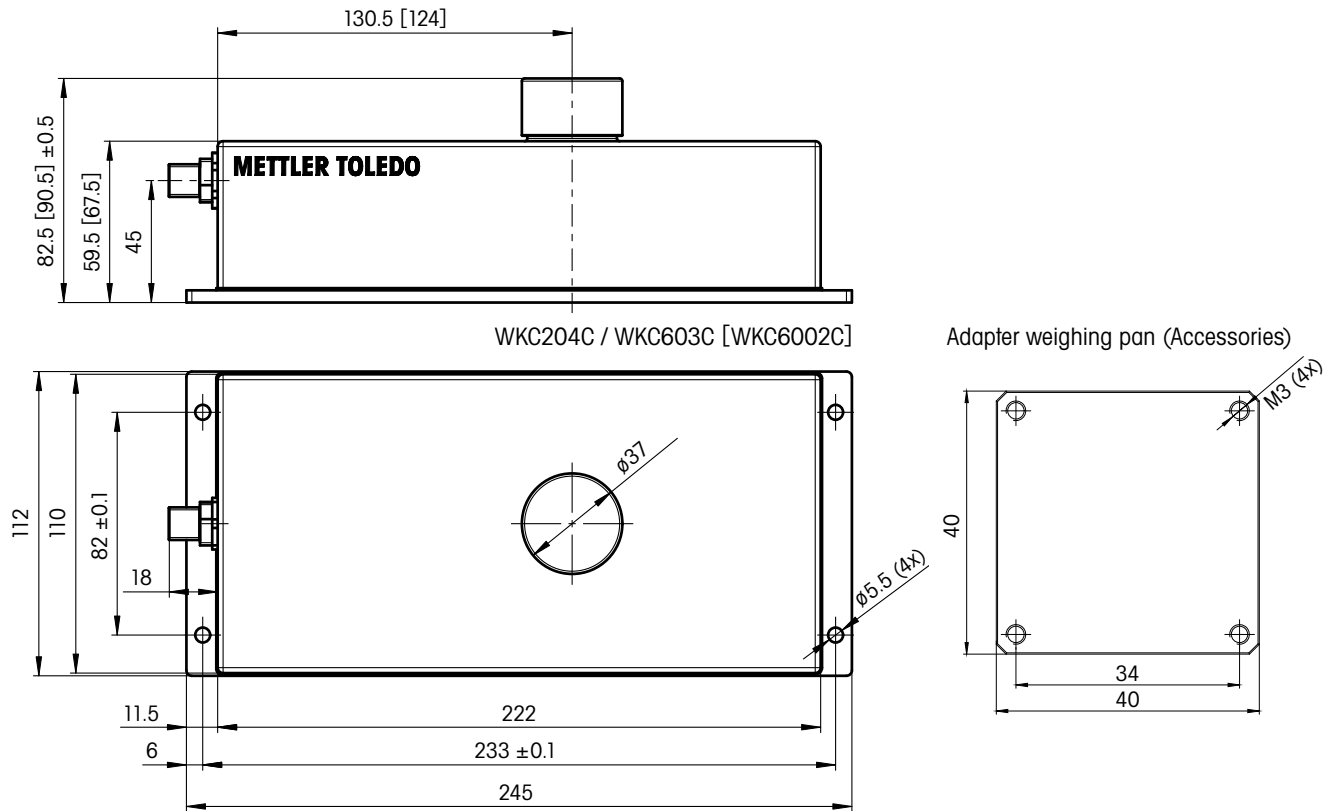
IP protection

Module during weighing	IP42
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Materials

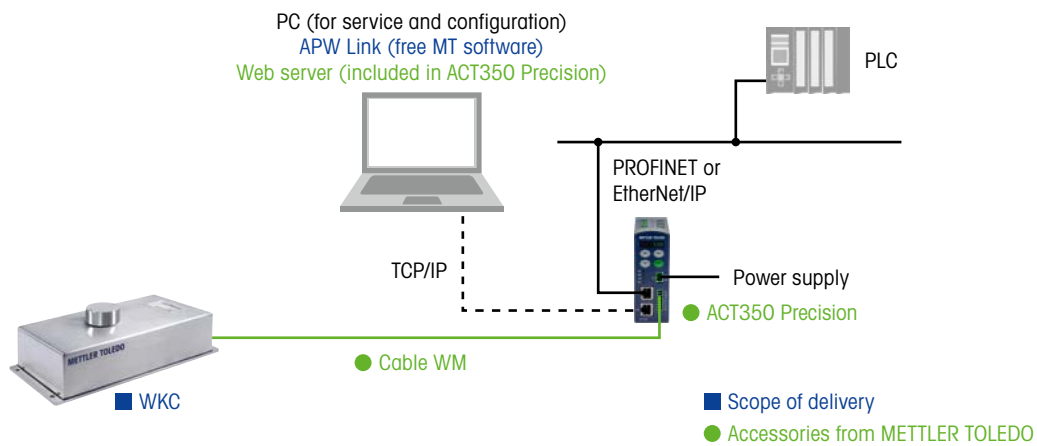
Weighing pan/platform	Stainless steel (1.4307 / 304L)
Weigh module housing	Stainless steel (1.4307 / 304L)
Cable	PUR-PVC
Seals	NBR

Drawings (mm)

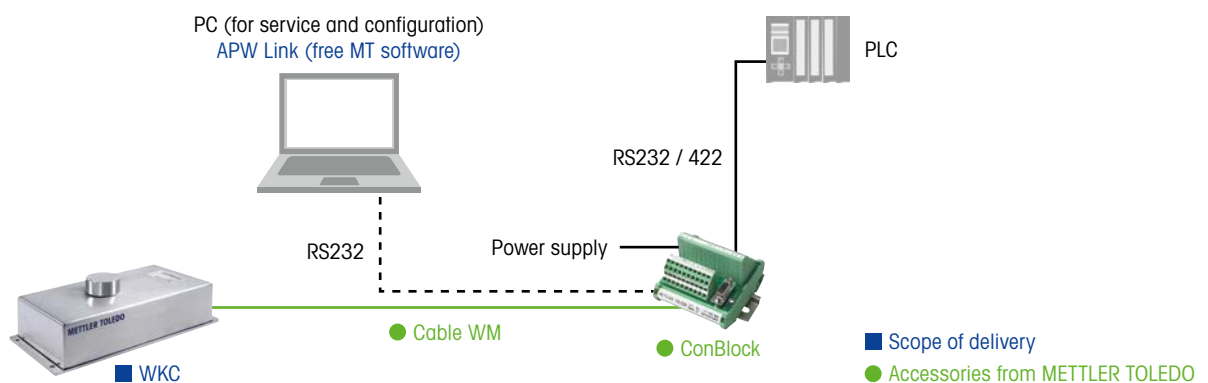


Typical Configurations

Automation network configuration











Serial interface configuration



Scope of Delivery

Item	Description	Item number
WKC	Weigh module	
Weighing pan (preload reference)	Ø = 37 mm, without threaded holes	302 653 96
User manual		
Production certificate		
Declaration of Conformity		

Accessories

Item	Description	Item number	Picture
Cable WM	12p 1.5 m (M12f 90° – open leads)	302 958 19	
Cable WM	12p 5.0 m (M12f 90° – open leads)	302 958 21	
Cable WM	12p 3.0 m (M12f 180° – open leads)	305 248 60	
Cable WM	12p 0.3 m (M12f 90° – M12m 180°)	305 248 74	
Cable WM	Y-Cable 12p 1.9 m (M12f 90° – DE-9 and DC Jack Ø5.5/2.5 mm)	304 895 64	
Adapter weighing pan	40 x 40 mm, with threaded holes	303 155 18	
ConBlock	Connection module	111 520 00	
ConBlock-X	Connection module IP66	303 740 66	
Single weights	100 g, OIML E2, including plastic box, certificate	303 155 27	
Single weights	200 g, OIML E2, including plastic box, certificate	303 155 28	
Single weights	500 g, OIML E2, including plastic box, certificate	303 155 29	
Single weights	1000 g, OIML E2, including plastic box, certificate	303 155 30	

Order Information

Module	Item number
WKC204C	302 483 07
WKC603C	302 483 08
WKC6002C	302 483 09

www.mt.com/WKC

For more information



METTLER TOLEDO Group

Industrial Division

Local contact: www.mt.com/contacts

Subject to technical changes

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