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SCALE KITS

Powerful balances and efficient weighing systems which support you in your work, should be adapted to your individual requirements. Standard models are therefore not sufficient under some circumstances.

Even the most comprehensive range of scales and measurement technology in some cases does not fully meet all requirements. A few weighing processes do require an individual special solution.

For this reason, we have special scale kits, with or without display device, ready for you, with which you can realize customized solutions for your applications.

All individual parts are matched to each other and thus offers the suitable solution for every case of application.

With the SAUTER scale kits, you become even more flexible in your application possibilities and benefit from a lower order effort and a price advantage.

Quick-Finder

Nominal load	Model	Page
kg	SAUTER	
300	CW 300	98
300	CW 300KFB	98
300	CW 300R	99
300	CW 300RKFN	99
600	CW 600R	99
600	CW 600RKFN	99
750	CW 750	98
750	CW 750KFB	98
1500	CW 1500	98
1500	CW 1500KFB	98
1500	CW 1500R	100
1500	CW 1500RKFN	100
3000	CW 3000	98
3000	CW 3000KFB	98
3000	CW 3000R	100
3000	CW 3000RKFN	100
4500	CW 4500	98
4500	CW 4500KFB	98
4500	CW 4500R	100
4500	CW 4500RKFN	100
6000	CW 6000R	100
6000	CW 6000RKFN	100
7500	CW 7500	98
7500	CW 7500KFB	98
9000	CW 9000	98
9000	CW 9000KFB	98
9000	CW 9000R	100
9000	CW 9000RKFN	100
15000	CW 15000	98
15000	CW 15000KFB	98



Scale kit with build-type approval for individual assembly of floor scales – suitable for use in harsh industrial environments with humid environmental conditions

Features

- Weighing solutions, e.g. for industry, automotive manufacturing and agriculture, in order to fulfil the diverse requirements in terms of dimensions, materials, combinations of peripheral devices, etc. Especially suitable, for example, for the manufacture of platform scales, weigh hoppers, silo scales, as well as flush-mounted floor scales. Area of use: Measuring mass and compressive force in harsh environments

Details for weighing cells:

- Accuracy in accordance with OIML R60 C3
- CE and RoHS compliant
- **1** Protection against dust and water splashes IP67 (in accordance with EN 60529)
- Nickel-plated steel
- Nominal sensitivity: 3 mV/V
- 4-wire connection
- Junctionbox SAUTER CJ P4PG:
 - The robust aluminium diecast housing
 - **2** Protection against dust and water splashes IP65
- Note: Use the SAUTER CW in combination with one of our display devices, for example, KFS-TM, YKV, CE HS (see [internet](#))

Accessories

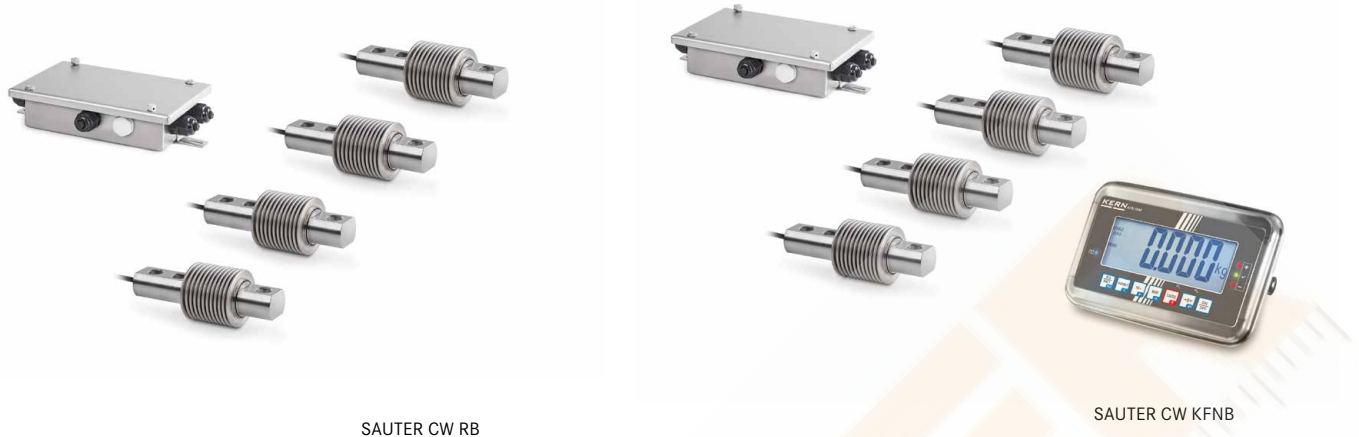
- Assembly of components, 50 kg - 350 kg, KERN 965-412
- Assembly of components, 350 kg - 1500 kg, KERN 965-413
- Assembly of components, 2900 kg - 6000 kg, KERN 965-415

Note: For individual special solutions we have special scale kits available for you which you can use to create a tailor-made solution which is just right for you. In this way you can use the most varied platform sizes or individual weighing systems, e.g. within larger production plants, which match your requirements perfectly.

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STANDARD

Model	Nominal load	Scope of delivery Load cells	Scope of delivery
SAUTER	kg		
CW 300	300	4 × CB 100-3P1	
CW 750	750	4 × CB 250-3P1	- 4 Adjustable feet CE P2012
CW 1500	1500	4 × CT 500-3P2	- 4 Distance plates CE P3012
CW 3000	3000	4 × CT 1000-3P2	- 1 Junction box CJ P4PG
CW 4500	4500	4 × CT 1500-3P1	
CW 7500	7500	4 × CT 2500-3P1	- 4 Adjustable feet CE P2018
CW 9000	9000	4 × CT 3000-3P2	- 4 Distance plates CE P3015
CW 15000	15000	4 × CT 5000-3P1	- 1 Junction box CJ P4PG
CW 300KFB	300	4 × CB 100-3P1	- 1 Display device KFB-TM
CW 750KFB	750	4 × CB 250-3P1	- 4 Adjustable feet CE P2012
CW 1500KFB	1500	4 × CT 500-3P2	- 4 Distance plates CE P3012
CW 3000KFB	3000	4 × CT 1000-3P2	- 1 Junction box CJ P4PG
CW 4500KFB	4500	4 × CT 1500-3P1	
CW 7500KFB	7500	4 × CT 2500-3P1	- 1 Display device KFB-TM
CW 9000KFB	9000	4 × CT 3000-3P2	- 4 Adjustable feet CE P2018
CW 15000KFB	15000	4 × CT 5000-3P1	- 4 Distance plates CE P3015
			- 1 Junction box CJ P4PG



Scale kit for individual assembly of floor scales – suitable for use in harsh industrial environments with humid environmental conditions

Features

- With SAUTER scale kits, individual weighing solutions can be put together, for example, individual balance manufacturing in agriculture or the food industry. In this way, a wide range requirements in terms of dimensions, materials, combinations of peripheral devices etc. can be fulfilled. Especially suitable for the manufacture of platform scales, weigh hoppers, silo scales, weighing devices for manure spreaders in agriculture, weighing device in municipal vehicles, e.g. waste disposal or winter road services, flush-mounted floor scales and other weighing devices

- Details for weighing cells:
 - CE and RoHS compliant
 - **1** Protection against dust and water splashes IP68/IP69K
 - Stainless steel
 - 2-wire connection
 - Nominal sensitivity: 3 mV/V
- Junctionbox SAUTER CJ X467:
 - **2** Robust housing made of stainless steel with IP67 dust and spray protection
- Note: Use the SAUTER CW RB in combination with one of our display devices, for example, KFS-TM, YKV, CE HS (see *internet*)

Accessories

- Assembly of components, 50 kg - 350 kg, KERN 965-412
- Assembly of components, 350 kg - 1500 kg, KERN 965-413

Note: For individual special solutions we have special scale kits available for you which you can use to create a tailor-made solution which is just right for you. In this way you can use the most varied platform sizes or individual weighing systems, e.g. within larger production plants, which match your requirements perfectly.

STANDARD



Model	Nominal load	Scope of delivery Load cells	Scope of delivery
SAUTER	kg		
CW 300R	300	4 × CB 100-3Q1	- 1 Junction box CJ X467
CW 600R	600	4 × CB 200-3Q1	
CW 300RKFNB	300	4 × CB 100-3Q1	- 1 Display device KFNB-TM
CW 600RKFNB	600	4 × CB 200-3Q1	- 1 Junction box CJ X467



Scale kit for individual assembly of floor scales – suitable for use in harsh industrial environments with humid environmental conditions

Features

- With SAUTER scale kits, individual weighing solutions can be put together, for example, individual balance manufacturing in industry, automotive manufacturing and agriculture. In this way, a wide range requirements in terms of dimensions, materials, combinations of peripheral devices etc. can be fulfilled. Especially suitable for the manufacture of platform scales, weigh hoppers, silo scales, flush-mounted floor scales and other weighing devices. Area of use: Measuring mass as well as compressive force in harsh environments

Details for weighing cells:

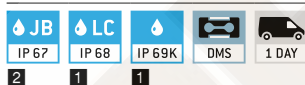
- Accuracy in accordance with OIML R60 C3
- CE and RoHS compliant
- **1** Protection against dust and water splashes IP68/IP69K
- alloy steel
- 6-wire connection
- Nominal sensitivity: 2 mV/V
- Junctionbox SAUTER CJ X467:
 - **2** Robust housing made of stainless steel with IP67 dust and spray protection
- Note: Use the SAUTER CW R in combination with one of our display devices, for example, KFS-TM, YKV, CE HS

Accessories

- Assembly of components, 350 kg - 1500 kg, KERN 965-413
- Assembly of components, 2900 kg - 6000 kg, KERN 965-415

Note: For individual special solutions we have special scale kits available for you which you can use to create a tailor-made solution which is just right for you. In this way you can use the most varied platform sizes or individual weighing systems, e.g. within larger production plants, which match your requirements perfectly.

STANDARD



Model	Nominal load	Scope of delivery Load cells	Scope of delivery
SAUTER	kg		
CW 1500R	1500	4 × CT 500-3Q1	- 4 Adjustable feet CE RQ12
CW 3000R	3000	4 × CT 1000-3Q1	- 4 Distance plates CE P3012
CW 4500R	4500	4 × CT 1500-3Q1	- 1 Junction box CJ X467
CW 6000R	6000	4 × CT 2000-3Q1	
CW 9000R	9000	4 × CT 3000-3Q1	4 Adjustable feet CE RQ35917 - 4 Distance plates CE P3015 - 1 Junction box CJ X467
CW 1500RKFN	1500	4 × CT 500-3Q1	- 1 Display device KFN-TM
CW 3000RKFN	3000	4 × CT 1000-3Q1	- 4 Adjustable feet CE RQ12
CW 4500RKFN	4500	4 × CT 1500-3Q1	- 4 Distance plates CE P3012
CW 6000RKFN	6000	4 × CT 2000-3Q1	- 1 Junction box CJ X467
CW 9000RKFN	9000	4 × CT 3000-3Q1	- 1 Display device KFN-TM - 4 Adjustable feet CE RQ35917 - 4 Distance plates CE P3015 - 1 Junction box CJ X467

Accredited Calibration with Calibration Certificate for Force Gauges

The KERN calibration laboratory is at your side when you need to calibrate with accreditation reliably. From the transducer to the full measuring chain, we are happy to take care of traceable calibration of your test equipment for you. Our accreditation includes the calibration of tensile and compressive force up to 5 kN according to the standards DIN EN ISO 376 and DKD-R 3-3, each with the Newton (N) display unit for a complete measuring chain (situation A) or voltage ratio/transmission coefficient (mV/V, situation B).

Below you will find a comparison of which standard meets which criteria:

Comparison of DIN EN ISO 376 and DKD-R 3-3

	ISO 376	DKD-R 3-3
Standardization	ISO standard (internationally standardized)	Standard of the DKD (Germany)
Measuring equipment	Force transducers and complete measuring chains	Force transducers and complete measuring chains
Area of application	Specifically force gauges for the testing of testing equipment	General force gauges
Number of power stages	8	5
Classification/Assessment	Classification in classes 00; 0,5; 1 and 2	None in standard
Test sequences	Fixed procedure	Processes A, B, C and D possible. Standard is A; B, C and D are reduced processes, corresponding previous knowledge is necessary
Summary	Higher-quality calibration, as 8 force levels are calibrated	High-quality calibration, reduced sequences with less effort possible

Prices for accredited Calibration of Force Gauges and Force Transducers

Situation A: Force transducer (voltage ratio, in mV/V)*^{1,2}

ISO 376 (8 stages)		DKD-R 3-3 (5 stages, sequence A)	
KERN	Measuring range	KERN	Measuring range
Tensile force:			
963-161IV (R)	≤ 500 N	963-161V (R)	≤ 500 N
963-162IV (R)	≤ 2 kN	963-162V (R)	≤ 2 kN
963-163IV (R)	≤ 5 kN	963-163V (R)	≤ 5 kN
Compression force:			
963-261IV (R)	≤ 500 N	963-261V (R)	≤ 500 N
963-262IV (R)	≤ 2 kN	963-262V (R)	≤ 2 kN
963-263IV (R)	≤ 5 kN	963-263V (R)	≤ 5 kN
Tensile and Compression force:			
963-361IV (R)	≤ 500 N	963-361V (R)	≤ 500 N
963-362IV (R)	≤ 2 kN	963-362V (R)	≤ 2 kN
963-363IV (R)	≤ 5 kN	963-363V (R)	≤ 5 kN

Situation B: Complete force gauge (in N)**²

ISO 376 (8 stages)		DKD-R 3-3 (5 stages, sequence A)	
KERN	Measuring range	KERN	Measuring range
Tensile force:			
963-161I (R)	≤ 500 N	963-161 (R)	≤ 500 N
963-162I (R)	≤ 2 kN	963-162 (R)	≤ 2 kN
963-163I (R)	≤ 5 kN	963-163 (R)	≤ 5 kN
Compression force:			
963-261I (R)	≤ 500 N	963-261 (R)	≤ 500 N
963-262I (R)	≤ 2 kN	963-262 (R)	≤ 2 kN
963-263I (R)	≤ 5 kN	963-263 (R)	≤ 5 kN
Tensile and Compression force:			
963-361I (R)	≤ 500 N	963-361 (R)	≤ 500 N
963-362I (R)	≤ 2 kN	963-362 (R)	≤ 2 kN
963-363I (R)	≤ 5 kN	963-363 (R)	≤ 5 kN

(R): Recalibration

For each force gauge without interface or from other manufacturers we charge a surcharge

¹ Compatibility with our amplifiers required

² Installation in our measuring equipment required

Factory Calibration Certificates

As DAkkS calibration certificates cannot be offered for all measuring devices or measurement sizes, or where it is not customary, we then offer factory calibration certificates. This is not an accredited calibration (no proof of metrological traceability). These calibrations are carried out according to in-house specifications and are available for many measuring instruments, such as:

- Mechanical balances (spring balances, etc.)
- Force-measuring devices up to 250 kN
- Measuring devices for layer thickness 0 µm – 2000 µm
- Hardness testing devices in accordance with Leeb tests
- Ultrasonic material thickness testing device 25 mm – 300 mm

We carry out calibrations independent of brand. In order to avoid any unnecessary delays when processing your order, please send us the technical documents and necessary accessories with the checking device. Calibration time 4 working days.

Factory Calibration for Force

Situation A: Force transducer (voltage ratio, in mV/V) ^{*1,2}		Situation B: Complete force gauge (in N) ^{*2}	
KERN	Measuring range	KERN	Measuring range
Tensile force:			
961-161V (R)	≤ 500 N	961-161 (R)	≤ 500 N
961-162V (R)	≤ 2 kN	961-162 (R)	≤ 2 kN
961-163V (R)	≤ 5 kN	961-163 (R)	≤ 5 kN
961-164V (R)	≤ 20 kN	961-164 (R)	≤ 20 kN
961-165V (R)	≤ 50 kN	961-165 (R)	≤ 50 kN
961-166V (R)	≤ 120 kN	961-166 (R)	≤ 120 kN
961-167V (R)	≤ 250 kN	961-167 (R)	≤ 250 kN
Compression force:			
961-261V (R)	≤ 500 N	961-261 (R)	≤ 500 N
961-262V (R)	≤ 2 kN	961-262 (R)	≤ 2 kN
961-263V (R)	≤ 5 kN	961-263 (R)	≤ 5 kN
961-264V (R)	≤ 20 kN	961-264 (R)	≤ 20 kN
961-265V (R)	≤ 50 kN	961-265 (R)	≤ 50 kN
961-266V (R)	≤ 120 kN	961-266 (R)	≤ 120 kN
961-267V (R)	≤ 250 kN	961-267 (R)	≤ 250 kN
Tensile and Compression force:			
961-361V (R)	≤ 500 N	961-361 (R)	≤ 500 N
961-362V (R)	≤ 2 kN	961-362 (R)	≤ 2 kN
961-363V (R)	≤ 5 kN	961-363 (R)	≤ 5 kN
961-364V (R)	≤ 20 kN	961-364 (R)	≤ 20 kN
961-365V (R)	≤ 50 kN	961-365 (R)	≤ 50 kN
961-366V (R)	≤ 120 kN	961-366 (R)	≤ 120 kN
961-367V (R)	≤ 250 kN	961-367 (R)	≤ 250 kN

(R): Recalibration

For each force gauge without interface or from other manufacturers we charge a surcharge

^{*1} Compatibility with our amplifiers required

^{*2} Installation in our measuring equipment required

Factory Calibration Certificates

KERN	Physical unit	Measuring range
Factory calibration		
961-102K	Force (for digital dynamometer KERN MAP)	≤ 130 kg
961-110	Coating thickness	≤ 2000 µm F or N
961-112	Coating thickness	≤ 2000 µm FN
961-113	Wall thickness (ultra sound)	≤ 300 mm (in stainless steel)
961-170	Hardness comparison plate (Shore)	For sets up to 7 plates
961-131	Hardness tester (Leeb)	400 – 800 HLD
961-132	Hardness comparison plate (Leeb)	Hardness comparison plate (for Leeb durometer)
961-270	Hardness (UCI)	200 – 800 HV
961-150	Length	≤ 300 mm
961-190	Light	≤ 200000 lx
961-100	Mass (Mechanical balances/ spring balances)	≤ 5 kg
961-101	Mass (Mechanical balances/ spring balances)	> 5 – 50 kg
961-102	Mass (Mechanical balances/ spring balances)	> 50 – 350 kg
961-103	Mass (Mechanical balances/ spring balances)	> 350 – 1500 kg
961-120	Torque wrench test devices	1 Nm – 200 Nm

Additional services

962-116 Express service with
48 hour delivery