



**KAB//Seating**

**6000**  
**SERIES**  
ADVANCED ENGINEERING

[www.kabseating.com](http://www.kabseating.com)

ENTER THE COMFORT ZONE



# KAB//Seating

The new 600 Series from KAB Seating provides all round solutions for Construction vehicle OEM's and Plant and Equipment Operators in the field.

## 600 SERIES ADVANCED ENGINEERING

- State of the Art Styling and materials
- Achieves ISO 7096 seat performance for construction vehicles in categories EM1, EM3, EM4, EM5, EM6 and EM8.
- Low Natural frequency suspensions.
- Uses technologically innovative design principles to achieve high quality results in production.
- Modular design concept to allow inter-changeability of Air or Mechanical suspensions, range of seat uppers and Positioning System Modules.
- Anatomically designed cushions and Ergonomic location of seat operating controls.
- Constant Seat Index Point (S.I.P) through the use of a Positioning System Module (PSM)
- Extended weight ranges, to allow for operators of 50kg up to 200kg (Air Version).
- Meets 22.2kN seat belt requirements without tether belts.
- Wide platform for improved stability and reduced free play in heavy duty applications.
- Robust design for extended life in the most severe environments



EM3

EM8

EM4

EM5

EM6

EM1



# KAB//Seating

KAB Seating, part of the CVG Global Construction Division based in Northampton England, have been experts in the field of suspension seating for over 40 years.

## 600 SERIES ADVANCED ENGINEERING

The new 600 Series from KAB Seating has been designed to be assembled on a modular basis in CVG plants around the world.

It comprises 3 elements:

Upper (K-Series) - 3 types

Positioning System Module (PSM) - 5 types

Suspension (600 Series) - 2 types

This allows customers to select a seat package according to their market needs, and to meet international standards and legislation. It is the latest in a long line of successful products sold by KAB Seating into the Construction, Mining and Industrial sectors.

The design of the heavy duty 600 Series also achieves a 36% reduction of components on the seat frame assembly and suspension through the use of much larger pressings and castings. A 33% reduction of weld over the seat frame has also been incorporated.

These improve assembly consistency and reduce the variety of spare parts needed to service the seats.

K-Series upper

PSM

600 Series Suspension



**K SERIES UPPERS**

Features	Seat Types		
	K4	K1	K6
Seat width	480mm	480mm	480mm
<b>Back Assembly</b>			
Backrest type	High Back	Mid Back	Low Back
Headrest guides	•	•	•
Mechanical lumbar support	•	•	•
Easy to detach back cushion	4 bolt fixing	4 bolt fixing	4 bolt fixing
Headrest	•	•	•
<b>Seat base Assembly</b>			
Cushion length adjustment	50mm	50mm	50mm
3 position seat tilt adjustment	0 to 7.5°	0 to 7.5°	0 to 7.5°
Back angle adjustment	•	•	•
Armrest fixings	•	•	•
Seat belt fixings	•	•	•
Clip in trim system	•	•	•
Removable seat cushion	•	•	•
Armrests	•	•	•
Seat belt	50mm or 70mm	50mm or 70mm	50mm or 70mm
Heaters (12v or 24v)	•	•	•
Seat occupant sensor	•	•	•
Document pouch	•	•	•

Standard • Optional •

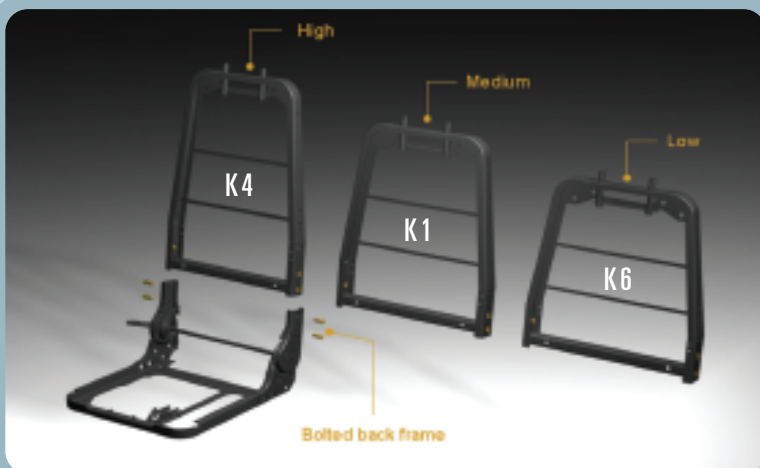
The K-Series of modular frames have been designed to use the same seat frame with different height back frames.

The frames can also accommodate cushions of different widths.

The K-Series has also been designed for easy trimming and assembly and for easy serviceability.

Comfort features such as lumbar support, heaters, seat cushion tilt and cushion length adjustment will maximise operator comfort.

For customised versions the frames can also take 3 or 4 point seat belts.



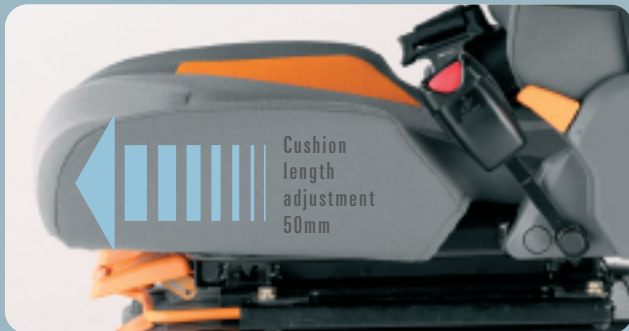
Removable seat cushion



Heater switch



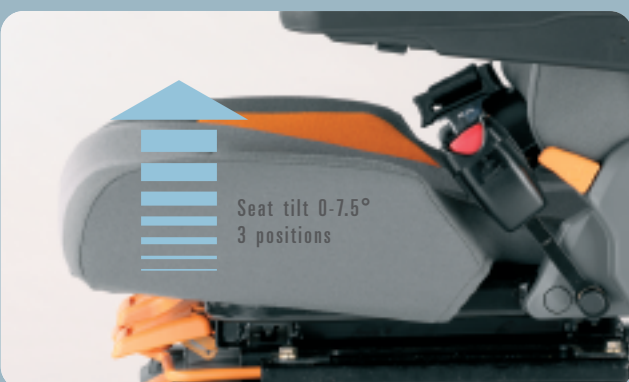
5 position  
mechanical  
lumbar  
support



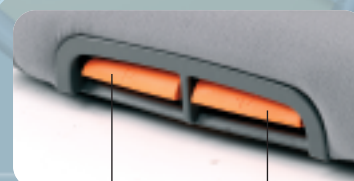
Cushion  
length  
adjustment  
50mm



Backrest  
angle  
adjustment



Seat tilt 0-7.5°  
3 positions



Seat tilt  
adjustment

Seat cushion  
adjustment

Seat belt  
mounting  
point

# 600 SERIES

ADVANCED ENGINEERING

## POSITIONING

## SYSTEM MODULE (PSM)

The PSM is designed to be fitted between the seat upper and suspension. The PSM package height is always the same to achieve a constant Seat Index Point (S.I.P.).

This allows customers to select options suited to their vehicles or markets depending on features required, without changing the seat ride height.

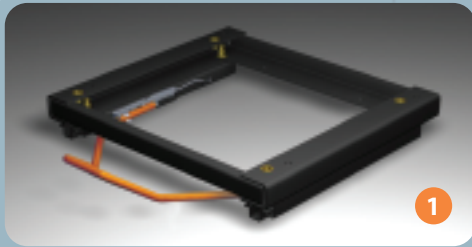
The PSM can take isolators which minimise harmful horizontal and lateral shocks.

The options are illustrated below:

### Positioning System Module (PSM)

- 1 Slide rail only module
- 2 Slide rail / Fore and Aft Isolator module
- 3 Slide rail / Lateral Isolator module
- 4 Slide rail / Fore and Aft, Lateral Isolator module
- 5 Customised PSM includes adjustable control pod arrangements

The use of the PSM ensures a constant S.I.P.



# SUSPENSION

## 600 SERIES

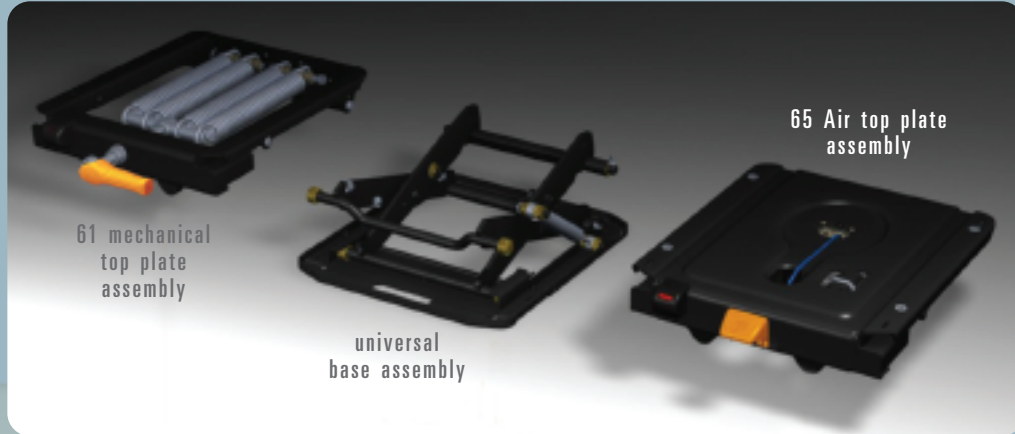
Suspension options	Air 65	Mechanical 61
Suspension spring type	Air spring	4 coil springs
Weight range - without consoles	50 - 200kg (440lbs)	50 - 170kg (375lbs)
Weight range - with consoles	50 - 170kg (375lbs)	50 - 140kg (310lbs)
Single damper	•	•
Double damper	•	•
Adjustable damper	•	•
Suspension cover	•	•
Weight adjustment	Air valve	Mechanical control
12v or 24v compressor	•	N/A
Suspension stroke	160mm	160mm
Integral height adjust	60mm	60mm

Standard • Optional •

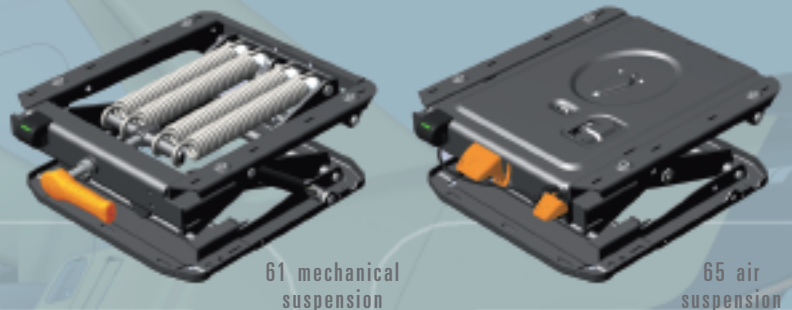
The new modular 600 Series suspensions from KAB Seating are designed for extended use in the most severe environments.

They have a wide platform to improve stability and a large weight range, from 50kg to 200kg in the case of the Air 65 suspension.

The modular suspensions have a low natural frequency to minimise harmful vibrations affecting operators.



The Air 65 and Mechanical 61 suspensions share a common base plate to facilitate assembly and servicing.



# 600 SERIES

ADVANCED ENGINEERING

## SEAT PERFORMANCE

Both Air and Mechanical versions comfortably meet ISO7096 standards for vehicles in categories EM1, EM3, EM4, EM5, EM6 and EM8 (see table).

The 600 Series meets these in its standard configuration, without the need to change damping or springs for each category.

The 600 Series will significantly reduce, or in some cases eliminate the harmful effects of vibration when measured in accordance with the Physical Agents Vibration Directive (PAVD).

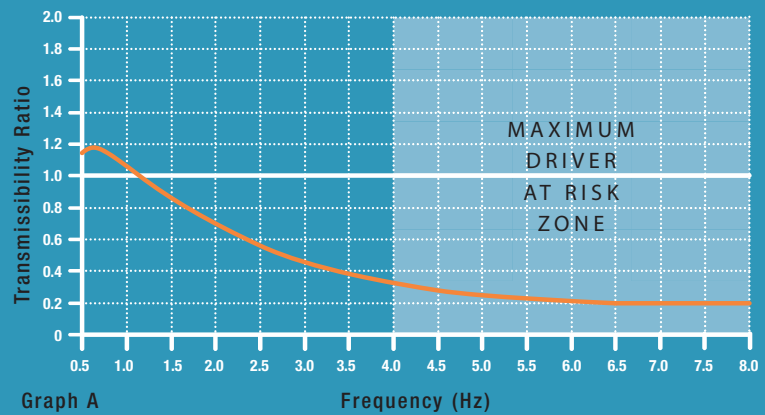
This improvement in performance has been achieved, using KAB Seating's experience to fine tune the 600 Series suspensions, for example by reducing friction by 60% and spring rate by 40%.

In tests, the 600 Series fitted with KAB Seating's unique, PSM with Fore and Aft and Lateral isolators has significantly reduced harmful horizontal vibration. For example, a hydraulic excavator performing combined tasks showed a 31% reduction in transmitted vibration.

### STANDARDS - ISO 7096 FOR z-DIRECTION

EM CLASS	APPLICATION	TARGET S.E.A.T. VALUES	MECHANICAL 61	AIR 65
1	Articulated dump truck	1.1	1.04	1.07
3	Wheeled loader (large)	1.0	0.93	0.97
4	Grader	1.1	0.93	1.04
5	Backhoe loader	0.7	0.58	0.59
6	Crawler dozer	0.7	0.50	0.39
8	Compact wheeled loader	0.8	0.68	0.67

### SEAT TRANSMISSIBILITY - 90kg MASS



The 600 Series performs especially well in the 4 to 8Hz frequency range where drivers are particularly at risk from harmful vibrations whilst operating construction machinery. (Graph A)

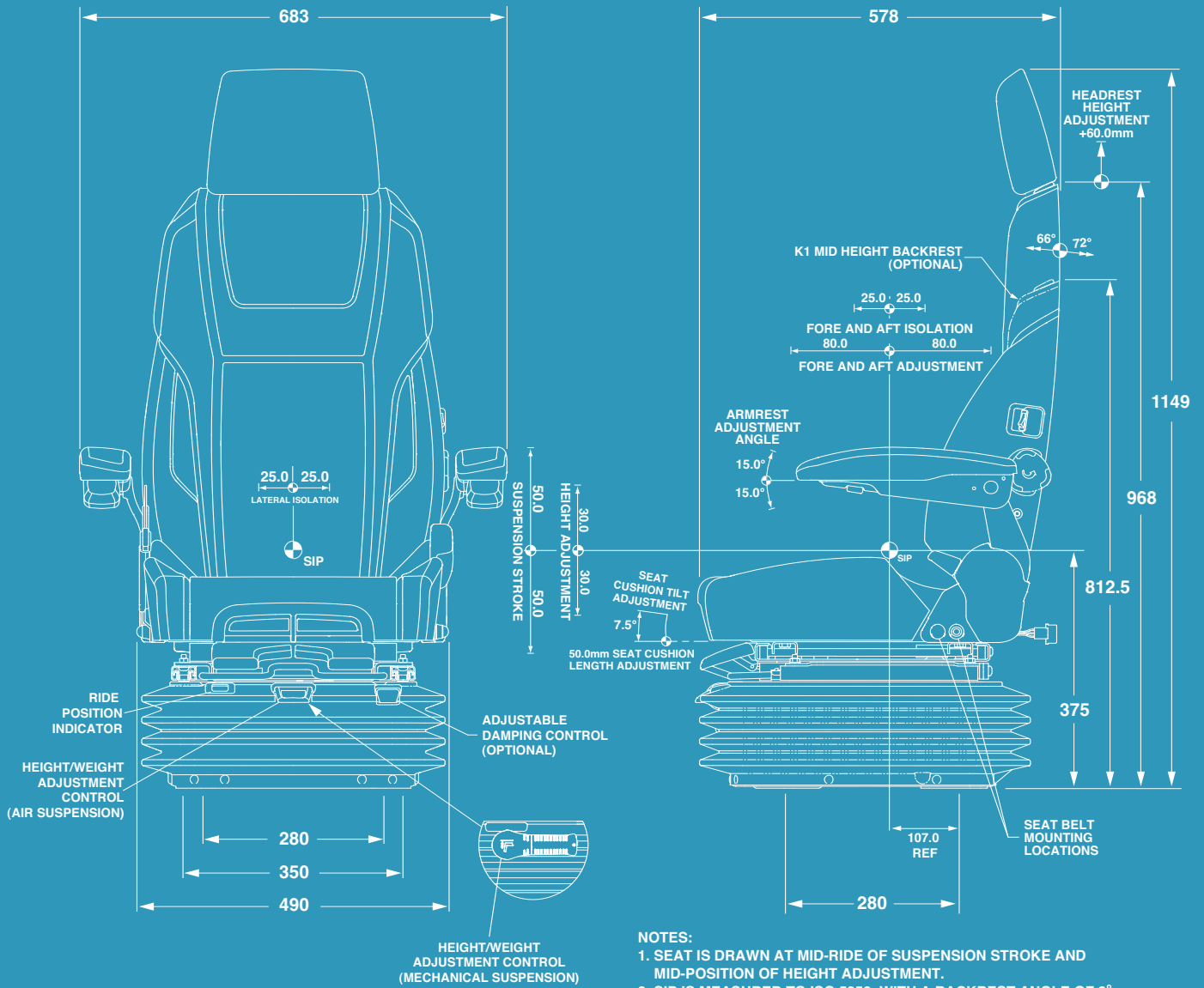
The KAB 600 Series has been designed to comply with the following specifications and regulations.

### SPECIFICATIONS AND TESTING

EN 474	Earth moving machinery safety
ISO 7096	Vibration performance
ISO 6683	15kN seat belt requirement
SAEJ386 June'85	22.2kN seat belt requirement
SAE J 2292	3/4 point harness regulation
ISO 11112	Earth moving machinery dimensions and regulations
FMVSS 302	Flammability requirements
ISO 5353	S.I.P.



# DIMENSIONS



**NOTES:**

1. SEAT IS DRAWN AT MID-RIDE OF SUSPENSION STROKE AND MID-POSITION OF HEIGHT ADJUSTMENT.
2. SIP IS MEASURED TO ISO 5353, WITH A BACKREST ANGLE OF 8°.
3. GENERAL TOLERANCE ±10.0mm.
4. SEAT BELT HIDDEN ON SIDE VIEW, FOR CLARITY.

**600 SERIES** ADVANCED ENGINEERING

**SERIOUS  
COMFORT  
AND SAFETY**



**600 SERIES**  
NEED ENGINEERING

Distributor

For over 40 years KAB Seating have been specialists in the design and manufacture of quality suspension seats.

Now, part of the CVG Inc. Global Construction Division, we are pleased to introduce the new 600 Series heavy duty suspension seats.

The 600 Series will be produced in CVG's custom built facility in Shanghai, China. It will be in a modular form, allowing for local assembly in CVG plants around the world.

The 600 Series will provide 'serious comfort and safety' to Construction Vehicle operators around the world.

Product supply and back up will be via CVG's own facilities and our worldwide distributor network.

### Health and Safety

It is important that drivers of work vehicles are fully protected from harmful vibrations. KAB 600 Series seats can eliminate up to 70% of these.

Careful seat selection is important and through consultation with KAB Seating's network of Authorised distributors the appropriate choice can be made.

### Installation

Care should be taken to ensure a correct installation is made and the seat suspension movements and adjustments are free from obstructions in the cab area.

### Maintenance

KAB Seating provides a full range of service parts to ensure seats can be maintained properly. Key wear items such as shock absorbers, seat cushions and air valves should be replaced on a regular basis in accordance with the type of usage, amount of usage and environmental factors. Regular removal of dust and dirt from the seat and cabin will improve the performance and longevity of the seat.

**KAB UK - KAB Seating Ltd**  
Northampton  
Tel: +44 (0) 1604 790500  
E.mail: [infouk@cvgrp.com](mailto:infouk@cvgrp.com)  
[www.kabseating.com](http://www.kabseating.com)

**KAB Sweden - KAB Seating AB**  
Stockholm  
Tel: +46 (0) 8 554 427 00  
E.mail: [infosweden@cvgrp.com](mailto:infosweden@cvgrp.com)

**KAB Belgium - KAB Seating SA**  
Seneffe  
Tel: +32 (0) 64 27 34 70  
E.mail: [infobelgium@cvgrp.com](mailto:infobelgium@cvgrp.com)

**KAB France - Liaison Office**  
Chatillon, Paris  
Tel: +33 (0) 1 40 92 97 40  
E.mail: [infofrance@cvgrp.com](mailto:infofrance@cvgrp.com)

**KAB Australia - KAB Seating Pty. Ltd**  
Brisbane  
Tel: +61 (0) 7 3344 0500  
E.mail: [infoaustralia@cvgrp.com](mailto:infoaustralia@cvgrp.com)

**CVG China - CVG Vehicle Components**  
Shanghai  
Tel: +86 21 5958 5801  
E.mail: [infochina@cvgrp.com](mailto:infochina@cvgrp.com)

**CVG World Headquarters**  
New Albany, Ohio, USA  
Tel: (614) 289-5360  
E.mail: [info@cvgrp.com](mailto:info@cvgrp.com)  
[www.cvgrp.com](http://www.cvgrp.com)

**CVG National Seating USA**  
Vonore, Tennessee  
Tel: +1 800 354 9621  
E.mail: [infoamerica@cvgrp.com](mailto:infoamerica@cvgrp.com)