

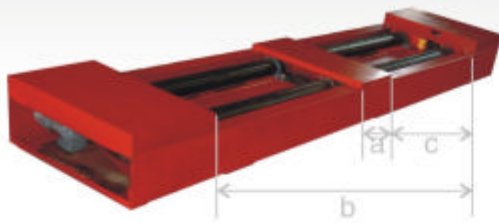


# Vehicle diagnosis equipment



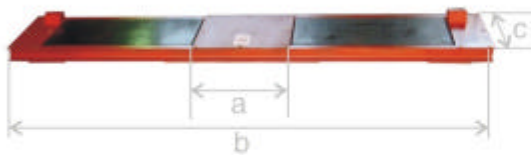
**KE** Koeng co., Ltd.

## Roller brake tester



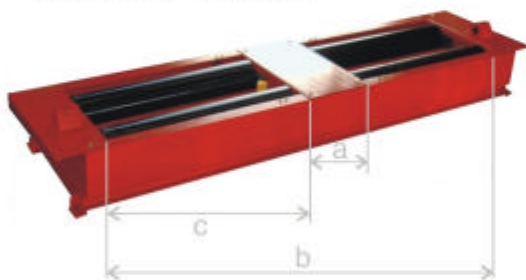
| MODEL                      |                    | KEB 3000                       | KEB 10000                      | KEB 15000          |
|----------------------------|--------------------|--------------------------------|--------------------------------|--------------------|
| MAX. WEIGHT (kg)           |                    | 3,000                          | 10,000                         | 15,000             |
| MAX BREAKING FORCE(kgf)    |                    | 1,500                          | 5,000                          | 10,000             |
| ROLLER                     | a x b (mm)         | 470 x 1,630                    | 470 x 2,880                    | 470 x 2,880        |
|                            | DIA $\phi$ x c(mm) | 104 x 850                      | 124 x 1,200                    | 124 x 1,200        |
|                            | Revolution RPM     | 9 rpm                          | 8 rpm                          | 8 rpm              |
| CYLINDER                   | DIA x STROKE       | $\phi$ 150 x 125mm             | $\phi$ 255 x 118mm             | $\phi$ 300 x 110mm |
|                            | Q'ty               | 2 EA                           | 2 EA                           | 2 EA               |
|                            | AIR PRSSURE        | 6 BAR                          | 8 BAR                          | 8 BAR              |
| DETECTING METHOD           |                    | LOAD CELL                      |                                |                    |
| DIMENSION (L x W x H) (mm) |                    | 3,355 x 620 x 470              | 4,000 x 810 x 670              | 4,000 x 810 x 670  |
| MOTOR CAPACITY             |                    | 200-380V/3ph/50-60Hz/0.7kw x 2 | 220-380V/3ph/50-60Hz/2.2kw x 2 |                    |

## Alignment side-slip tester



| MODEL                      |  | KEA 3000                 | KEA 10000         | KEA 15000           |
|----------------------------|--|--------------------------|-------------------|---------------------|
| MAX. WEIGHT (kg)           |  | 3,000                    | 10,000            | 15,000              |
| MEASURING RANGE            |  | In/Out : 0.0 - 10.0 m/km |                   |                     |
| DETECTING METHOD           |  | POTENTIOMETER            |                   |                     |
| PLATE (a x b) x c          |  | 700 x 2200 x 500         | 745 x 2,750 x 500 | 750 x 2,950 x 1,000 |
| DIMENSION (L x W x H) (mm) |  | 3,060 x 610 x 140        | 3,180 x 610 x 160 | 3,380 x 1110 x 160  |
| POWER SUPPLY               |  | AC 220V / 1ph/ 50-60Hz   |                   |                     |

## Speed meter



| MODEL                      |                | KES - 3000                    | KES - 10000         | KES - 15000          |
|----------------------------|----------------|-------------------------------|---------------------|----------------------|
| MAX. WEIGHT(kg)            |                | 3,000                         | 10,000              | 15,000               |
| MEASURING RANGE            |                | 0 - 120km/h                   | 0 - 120km/h         | 0 - 120km/h          |
| ROLLER                     | a x b (mm)     | 645 x 2,345                   | 490 x 2,890         | 490 x 2,890          |
|                            | $\phi$ x c(mm) | $\phi$ 185 x 850mm            | $\phi$ 185 x 1200mm | $\phi$ 185 x 1,200mm |
| MEASURING SPEED            |                | 40 km/h                       | 40 km/h             | 40 km/h              |
| CYLINDER                   | DIA x STROKE   | $\phi$ 150 x 125mm            | $\phi$ 255 x 118mm  | $\phi$ 300 x 110mm   |
|                            | Q'ty           | 2 EA                          | 2 EA                | 2 EA                 |
|                            | AIR PRSSURE    | 6 BAR                         | 6 BAR               | 6 BAR                |
| DETECTING METHOD           |                | ENCODER                       |                     |                      |
| DIMENSION (L x W x H) (mm) |                | 2,900 x 720 x 310             | 3,210 x 850 x 650   | 3,210 x 850 x 650    |
| POWER SUPPLY               |                | AC 110V - 220V / 1ph/ 50-60Hz |                     |                      |

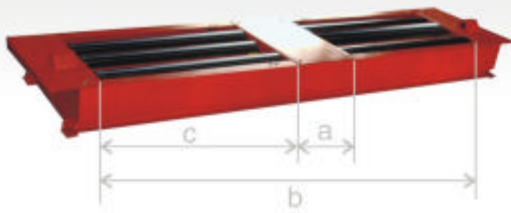
## Head - light tester



| MODEL                       | KEH - 3000                                     |
|-----------------------------|--|
| MEASURING LENGTH            | 3M   |
| MEASURING RANGE             | 0 - 80,000 cd                                  |
| BODY DIMENSION (W x D x H)  | 700 x 525 x 1340                               |
| MEASURING HEIGHT            | 500 - 1,200 mm                                 |
| RAIL (W x L)mm              | 480 x 40,00 mm                                 |
| DIMENSION. (L x W x H) (mm) | 415 x 300 x 325                                |
| MEASURING ANGLE             | UP 1°20" - down 2°20" left 2°20" - Right 2°20" |



### Free roller



| MODEL                     |              | KEFR - 3000                   | KEFR - 10000      | KEFR - 15000      |
|---------------------------|--------------|-------------------------------|-------------------|-------------------|
| MAX. WEIGHT(kg)           |              | 3,000                         | 10,000            | 15,000            |
| ROLLER                    | a x b (mm)   | 645 x 2,345                   | 490 x 2,890       | 490 x 2,890       |
|                           | ∅ x c(mm)    | ∅185 x 850mm                  | ∅185 x 1,200mm    | ∅185 x 1,200mm    |
| CYLINDER                  | DIA x STROKE | ∅150 x 125mm                  | ∅255 x 118mm      | ∅300 x 110mm      |
|                           | Q'ty         | 3 EA                          | 3 EA              | 3 EA              |
|                           | AIR PRSSURE  | 6 BAR                         | 8 BAR             | 8 BAR             |
| DIMENSION (L x W x H)(mm) |              | 2,900 x 850 x 310             | 3,210 x 850 x 550 | 3,210 x 850 x 550 |
| POWER SUPPLY              |              | AC 110V - 220V / 1ph/ 50-60Hz |                   |                   |

### Axle load meter (weighting system)



| MODEL                     | KEAL 3000              | KEAL 10000        | KEAL 15000        |
|---------------------------|------------------------|-------------------|-------------------|
| MAX. WEIGHT (kg)          | 3,000                  | 10,000            | 15,000            |
| DETECTING METHOD          | LOAD CELL              |                   |                   |
| PLATE (a x b)             | 2,200 x 500            | 2,750 x 500       | 2,950 x 1000      |
| DIMENSION (L x W x H)(mm) | 3,060 x 610 x 140      | 3,180 x 610 x 160 | 3,380 x 610 x 160 |
| POWER SUPPLY              | AC 220V / 1ph/ 50-60Hz |                   |                   |

### Play detector



#### DIMENSIONS

|                    |                      |
|--------------------|----------------------|
| Plate Dimension    | 740 x 740 x 170mm    |
| Equipment weight   | 420 kg               |
| Packing dimensions | 1,120 x 790 x 760 mm |
| Gross weight       | 500kg                |

|   |               |
|---|---------------|
| Maximum weight per axle                                 | 18 ton        |
| Motors  | 3 CV          |
| Voltage (3-ph 1500 r.p.m)                               | 220 / 380V    |
| Thermal protector                                       | 10 A          |
| Protecting fuse   | 3 A           |
| Lamp  | 12V / 15V     |
| Pump storing capacity                                   | 15 Lit SAE-10 |
| Hydraulic group   | 12 l / minute |
| Hydraulic pump  | 30.000 N      |
| Side displacement                                       | 90 mm         |
| Longitudinal and transversal movement of the left plate |               |
| Longitudinal movement of the right plate                |               |
| Drive and control in lamp with cable                    |               |

### Measuring unit



ABS - Manual type

INSPECTION READY    MANUAL INSPECTION    SIDE-SLIP TESTER

BRAKE TESTER    SPEED METER    PRINT

ABS - Automatic type



# Gas analyzer



Model **KEG - 500(4GAS)/(5GAS)**

|                            |   |            |                                      |
|----------------------------|---|------------|--------------------------------------|
| Measuring item             | CO, HC, CO2, O2, λ (air surplus rate), AFR, NOX (optional)  |            |                                      |
| Measuring method           | CO, HC, CO2 : NDIR Method<br>O2, NOX : Electrochemical Cell   |            |                                      |
| Measuring range            | CO  | 0.00-9.99% | HC 0-9999ppm<br>(0-2000ppm optional) |
| Resolution                 |   | 0.01%      | 1ppm                                 |
| Measuring range            | CO2   | 0.0-20.0%  | O2 0.00-25.00%                       |
| Resolution                 |   | 0.1%       | 0.01%                                |
| Measuring range            | λ   | 0-2.000    | AFR 0.0-99.0                         |
| Resolution                 |   | 0.001      | 0.1                                  |
| Measuring range            | NOx   | 0-5000ppm  |                                      |
| Resolution                 |   | 1ppm       |                                      |
| Repeatability              | Less than ± 2% FS   |            |                                      |
| Response time              | Within 10 seconds (more than 90%)   |            |                                      |
| Warming up time            | About 2-6 minutes   |            |                                      |
| Sample collecting quantity | 4-6 L/min   |            |                                      |
| Power                      | AC110V / AC220V ± 10%, 50 / 60Hz  |            |                                      |
| Power consumption          | About 50 W  |            |                                      |
| Operation temperature      | 0°C ~ 40°C  |            |                                      |
| Dimensions                 | 285 (W) x 410 (D) x 155 (H) mm  |            |                                      |
| Packing dimensions         | 530 (W) x 430 (D) x 350 (H) mm  |            |                                      |
| Net Weight(Gross weight)   | 4.5kg(9.2kg)  |            |                                      |
| Basic accessories          | Probe, Probe hose, Spare fuse, Leak test cap, Spare filter, Power cord, Ground cable, Calibration controller nipple, Calibration connecting hose, Rs 232, Communication Cable Printer |            |                                      |

# Opacity meter



Compact type



Portable type

Model **OP-50**

|         | Range      | Resolution | Accuracy                         |
|---------|------------|------------|----------------------------------|
| Opacity | 0-100%     | 0.1%       | 2%                               |
| K       | 0-99.99m-1 | 10.01m-1   | 2% (calculated in opacity value) |

Oil temp, Rpm

| Specifications          | Compact type  | Portable type                                  |
|-------------------------|---|--|
| Optical path length     |   | 364 mm   |
| Light source            |   | Green LED (560 nm)                             |
| External connections    | RS 232 for PC-connection, Centronics (not for integrated printer) | Rpm adapter (option), Oil temp. probe (option) |
| Warm-up time            |   | approx. 3 minutes                              |
| Temperature range       |   | -20°C to +40°C                                 |
| Power supply            | 230 VAC, 50/60 Hz, Approx. 1 A., (12 VDC version optional)        |  |
| Detector                | Silicon Photodiode  |  |
| Size (measuring unit)   | 460 x 340 x 260 (mm)  |  |
| Size (display unit)     | 530 x 530 x 320 (mm)  | 380 x 250 x 180 (mm)                           |
| Weight (measuring unit) | 13.4 kg   | 7.0 kg   |
| Weight (display unit)   | 7.0 kg  | 4.5 kg   |

# Automatic smoke tester

Model **DS - 3000**

## Features

- Automatic three mode
- Portable (compact size)
- Internal printer
- Pc Program (RS232) (optional)
- Wireless remote control (optional)



## Specification

|                       |                                 |
|-----------------------|---------------------------------|
| Measurement principle | Reflection photometry           |
| Smoke sampling        | Air cylinder                    |
| Sampling volume       | 330 ± 15cc                      |
| Display               | digital display                 |
| Measurement range     | 0 - 100%                        |
| Power supply          | AC 110V or AC220V ± 10% 50/60Hz |
| Dimensions (mm)       | 250(W) x 400(D) x 250(D)        |
| Weight                | About 8kg                       |

# Sound level meter



Model **2062**

|                     |  |
|---------------------|--|
| Applicable standard | IEC 651 TYPE2, JIS C 1502  |
| Frequency range     | 20Hz - 8,000Hz   |
| Measuring range     | 30 - 130dB(A), 40 - 130dB(C)   |
| Microphone          | Type E-2, 1/2 inch back, Electric Condenser, Microphone                                  |
| Dynamic range       | 40dB ± 10dB  |
| b B range           | 30 - 70dB, 60 - 100dB, 90 - 130dB  |
| Measuring mode      | Sound level LP(A), Sound pressure level LP(C), Max, hold                                 |
| Resolution          | 0.1 dB   |
| Calibration         | Internal oscillator  |
| Display             | 4 digits, 7 segments, Over-load, Under-load display                                      |
| Out put             | AC output(linear), DC output(log), 1 V/Full scale, Impedance 10K                         |
| Operating condition | - 10 - +50°C humidity 30-85%   |
| Power supply        | 3V x 2, 100VA (Adapter)  |
| Dimensions          | 168(H) x 70(W) x 31(D)mm, With microphone 243(L)mm<br>Weight:300g/Mike, battery included |

**KF Koeng co., Ltd.**

B-806, TWINTECH, 345-9, GASAN DONG, GELMCHAEON GU, SEOUL, KOREA  
(Tel)+82-2-838-6300 (Fax)+82-2-6292-6292 / +82-2-839-4700  
<http://www.koeng.com> E-mail : [export@koeng.com](mailto:export@koeng.com)