



DK Series

Semi-Automatic Digestion Units

Versatile, safe and precise block digesters for Kjeldahl analysis



Semi-Automatic Digesters

The DK Series consists of basic digestion blocks providing accuracy, high thermal homogeneity and minimum energy consumption. DK Series digester are suitable for Kjeldahl digestion application and selected models can be combined with accessories in order to perform COD and Trace Metal Determination applications.

EXCELLENT ACCURACY AND REPEATABILITY

The aluminum heating block ensures high thermal homogeneity heating up to 450°C.

- Temperature selection with 1°C steps and a precision of $\pm 0.2^\circ\text{C}$.
- Heating block temperature stability of $\pm 0.5^\circ\text{C}$.

ENERGY SAVINGS

The DK Series digesters guarantee fast temperature set point reaching, reducing the energy consumptions.

- Average 13% lower consumption compared to the previous models.

SPACE SAVING DESIGN

Save valuable space under the fume hood with the VELP DK digesters. The design of the DK Series ensures minimum space requirement.

INTUITIVE INTERFACE

The bright digital display provides maximum visibility and easy reading of the information.

- Supports the recording of up to 20 methods with 4 temperature ramps.
- Easy to use interface with 4 buttons.

VERSATILE

All models DK models are available with tubes and all necessary parts to operate.

- Wide range of accessories is available to match analytical requirements.
- Genuine consumables to digest efficiently the samples.



TEMS™ Technology

Save Time, Energy, Money and Space.



VELP SOLUTIONS FOR KJELDAHL ANALYSIS

SAMPLE



1 DIGESTION

DKL SERIES / DK SERIES
DIGESTERS

JP
RECIRCULATING WATER VACUUM PUMP

SMS
SCRUBBER

2 DISTILLATION

UDK SERIES
DISTILLATION UNITS

3 TITRATION

UDK 149
CONNECTIVITY TO EXTERNAL TITRATION
SYSTEMS

UDK 159 / UDK 169
INTEGRATED COLORIMETRIC TITRATION
SYSTEM



NITROGEN mg (Protein %)

Configurations



DK 6

6 positions for 250 ml test tubes Ø 42 mm



DK 6/48

6 positions for 300 ml test tubes Ø 48 mm



DK 8

8 positions for 250 ml test tubes Ø 42 mm



DK 18/26

18 positions for 100 ml test tubes Ø 26 mm



DK 20

20 positions for 250 ml test tubes Ø 42 mm



DK 42/26

42 positions for 100 ml test tubes Ø 26 mm

VELP Recommendation

In order to remove hazardous and noxious gases and vapors generated during the digestion process, every digester should be combined with a SMS Scrubber and a JP Pump to prevent potential damage to the digester and surrounding equipment.

SMS SCRUBBER



SMS SCRUBBER is designed for the neutralization of toxic and corrosive fumes coming from digestion.

- HIGHLY COMPACT AND EFFICIENT
- USABLE FOR BOTH BASIC AND ACID NEUTRALIZATION
- SAFE AND ROBUST

JP PUMP



JP WATER VACUUM PUMP is an innovative and reliable recirculating water pump for aspirating fumes with dual operating modes.

- AUTOMATION AND OPTIMIZATION OF VACUUM POWER
- REDUCED WATER CONSUMPTION
- HIGH EFFICIENCY

INSTRUMENT - CODE

| | POWER | SYSTEM | INSTRUMENT |
|----------|--|-------------------------------------|-------------------------------------|
| DK 6 | 230 V / 50-60 Hz 115 V / 50-60 Hz 100 V / 50-60 Hz | S30100400 S30110400 S30180400 | F30100400 F30110400 F30180400 |
| DK 6/48 | 230 V / 50-60 Hz 115 V / 50-60 Hz | S30100410 S30110410 | F30100410 F30110410 |
| DK 8 | 230 V / 50-60 Hz 115 V / 50-60 Hz 100 V / 50-60 Hz | S30100420 S30110420 S30180420 | F30100420 F30110420 F30180420 |
| DK 18/26 | 230 V / 50-60 Hz 115 V / 50-60 Hz 100 V / 50-60 Hz | S30100430 S30110430 S30180430 | F30100430 F30110430 F30180430 |
| DK 20 | 230 V / 50-60 Hz 200 V / 50-60 Hz | S30100440 S30110440 | F30100440 F30110440 |
| DK 42/26 | 230 V / 50-60 Hz 200 V / 50-60 Hz | S30100450 S30110450 | F30100450 F30110450 |

OPTIONAL ACCESSORIES

| | |
|--|-----------|
| Glass cap | A00000243 |
| Air condenser with ground cone | A00001041 |
| PTFE sheaths for 29/32 cones | A00001042 |
| Antisplash bell | A00001045 |
| Stand for DK6-DK6/48 | A00000397 |
| Stand for DK-DKL8 DK18/26 | A00000184 |
| Stand for DKL-DK20, DKL-DK42/26 | A00000182 |
| Adapter for probe Ø3 mm for DK-DKL-ECO | A00000362 |
| TMD6 Mineralization System | A00000409 |
| Sample rack for COD DK6 | A00000408 |
| Sample rack for COD DKL20-DK20 | A00000237 |
| Test tube COD Ø42x200 mm 200 ml, 3 pcs/box | A00000145 |
| IQ/OQ DK Manual | A00008338 |
| KJTabs VCM - 1000 pcs/box | A00000274 |
| KJTabs VKPC - 1000 pcs/box | A00000275 |
| KJTabs VCT - 1000 pcs/box | A00000276 |
| KJTabs VST - 1000 pcs/box | A00000277 |
| KJTabs VTCT - 1000 pcs/box | A00000281 |
| KJTabs VW - 1000 pcs/box | A00000282 |
| KJTabs VS - 1000 pcs/box | A00000283 |
| Weighing boats 58x10x10 mm, 100 pcs/box | CM0486000 |
| Weighing boats 70x23x15 mm, 100 pcs/box | CM0486001 |

SUPPLIED WITH THE SYSTEM



| | |
|----------|-----------|
| DK 6 | A00000191 |
| DK 6/48 | A00000191 |
| DK 8 | A00000191 |
| DK 18/26 | A00000191 |
| DK 20 | A00000190 |
| DK 42/26 | A00000190 |



| | |
|----------|-----------|
| DK 6 | A00000395 |
| DK 6/48 | A00000398 |
| DK 8 | A00000173 |
| DK 18/26 | A00000400 |
| DK 20 | A00000168 |
| DK 42/26 | A00000179 |



| | |
|----------|-----------|
| DK 6 | A00000396 |
| DK 6/48 | A00000399 |
| DK 8 | A00000175 |
| DK 18/26 | A00000401 |
| DK 20 | A00000169 |
| DK 42/26 | A00000180 |



| | |
|----------|-----------|
| DK 6 | A00000144 |
| DK 6/48 | A00001088 |
| DK 8 | A00000144 |
| DK 18/26 | A00000146 |
| DK 20 | A00000144 |
| DK 42/26 | A00000146 |

FIELDS OF APPLICATION

The DK Series is suitable for a variety of applications including the determination of nitrogen, protein, COD, TKN and more, in accordance with official methods.



FOOD, FEED AND BEVERAGE INDUSTRY



ENVIRONMENTAL INDUSTRY



PHARMACEUTICAL AND CHEMICAL INDUSTRY

TECHNICAL DATA

| | DK 6 | DK 6/48 | DK 8 | DK 18/26 | DK 20 | DK 42/26 |
|---|---|---|---|---|---|---|
| CONSTRUCTION MATERIAL | Epoxy painted with chemical resistant coating | Epoxy painted with chemical resistant coating | Epoxy painted with chemical resistant coating | Epoxy painted with chemical resistant coating | Epoxy painted with chemical resistant coating | Epoxy painted with chemical resistant coating |
| TEMPERATURE RANGE | Ambient to 450 °C / 842 °F | Ambient to 450 °C / 842 °F | Ambient to 450 °C / 842 °F | Ambient to 450 °C / 842 °F | Ambient to 450 °C / 842 °F | Ambient to 450 °C / 842 °F |
| STABILITY OF THE HEATING BLOCK TEMPERATURE | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C |
| PRECISION OF THE HEATING BLOCK TEMPERATURE | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C | ± 0,5 °C |
| SET TEMPERATURE | Digital readout in °C or °F | Digital readout in °C or °F | Digital readout in °C or °F | Digital readout in °C or °F | Digital readout in °C or °F | Digital readout in °C or °F |
| TEMPERATURE CALIBRATION | Automatic | Automatic | Automatic | Automatic | Automatic | Automatic |
| SELECTABLE RAMPS | Up to 4 per program | Up to 4 per program | Up to 4 per program | Up to 4 per program | Up to 4 per program | Up to 4 per program |
| DIGESTION TIME RANGE | 1 to 999 minutes | 1 to 999 minutes | 1 to 999 minutes | 1 to 999 minutes | 1 to 999 minutes | 1 to 999 minutes |
| TIME SELECTION | 1 minute steps | 1 minute steps | 1 minute steps | 1 minute steps | 1 minute steps | 1 minute steps |
| COUNTDOWN | Digital readout | Digital readout | Digital readout | Digital readout | Digital readout | Digital readout |
| SELECTABLE LANGUAGE | EN, IT | EN, IT | EN, IT | EN, IT | EN, IT | EN, IT |
| HEATING PLACES | 6-position | 6-position | 8-position | 18-position | 20-position | 42-position |
| SIZE OF TUBES | 250 ml test tubes (Ø 42 mm) | 300ml test tubes, Ø 48 mm | 250 ml test tubes (Ø 42 mm) | 100 ml test tubes, Ø 26 mm | 250 ml test tubes (Ø 42 mm) | 100 ml test tubes, Ø 26 mm |
| POWER | 1000 W | 1000 W | 1150 W | 1150 W | 2300 W | 2300 W |
| WEIGHT | 9 kg (35.7 lb) | 9 kg (35.7 lb) | 11 kg (24.2 lb) | 11 kg (24.2 lb) | 18 kg (39.7 lb) | 18 kg (39.7 lb) |
| DIMENSIONS (WxHxD) (aluminum block only) | 350x220x130 mm (13.8x8.7x5.1 in) | 350x220x130 mm (13.8x8.7x5.1 in) | 420x230x130 mm (16.5x9x5.1 in) | 420x230x130 mm (16.5x9x5.1 in) | 330x140x510 mm (12.9x5.4x20.1 in) | 330x140x510 mm (12.9x5.4x20.1 in) |



SERVICE & SUPPORT

VELP Scientifica products are designed by our engineers to resist years of laboratory use.

Our products are manufactured with premium materials to guarantee the best performance with maximum safety.

According to our experience, a proper and regular maintenance is necessary to ensure the highest performance of analytical instrument. VEP Service Department and VEP Official Partners are always ready to offer you maintenance and service support tailored to your needs.

GET THE SUPPORT YOU NEED CHOOSING THE OPTIONS:

- [Installation](#)
- [Preventive Maintenance](#)
- [Help-desk and Remote support](#)
- [Technical Assistance](#)
- [Analytical Support](#)
- [Calibration Certification](#)



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