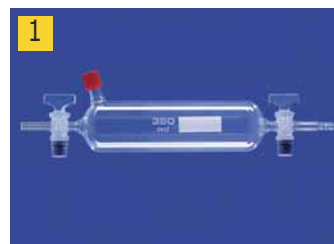


Gas sampling tubes, DURAN® tubing

Made of DURAN® tubing. Available with or without nozzle (with thread GL and septa), with two one-way stopcocks NS14 (with retaining device), connections: capillary tube (outer dia. 8 mm, inner dia. 2.7 mm), glass olive (outer dia. 8 mm), with inscription label. Also available with PUR coating.

Lenz



9.110 236

| Type | Capacity | External body diam. | Length* | PK | Cat. No. |
|----------------------------------|----------|---------------------|---------|----|-------------|
| | ml | mm | | | |
| Without sampling connections | 150 | 42 | 155 | 1 | 9.110 215 |
| Without sampling connections | 350 | 54 | 200 | 1 | 9.110 220 |
| Without sampling connections | 500 | 65 | 220 | 1 | 9.110 225 |
| Without sampling connections | 1000 | 85 | 260 | 1 | 9.110 230 |
| With sampling connections, GL 14 | 150 | 42 | 155 | 1 | 6.243 069 |
| With sampling connections, GL 14 | 350 | 54 | 200 | 1 | 9.110 236 1 |
| With sampling connections, GL 14 | 500 | 65 | 220 | 1 | 9.110 237 |
| With sampling connections, GL 14 | 1000 | 85 | 260 | 1 | 7.623 930 |

* Body length (mm)

2 Digital Anemometer

For the measurement of wind speed (in m/s, km/h, mph, knots, ft/min), maximum and average wind speed, indication of temperature (in °C or °F). LCD backlight display. Auto/Manual power off. Useful for the functional check of fume hoods and safety cabinets.

Wind speed range: 0.2 to 30 m/s
 Resolution: 0.1 m/s
 Accuracy: ±5 %
 Temperature range: -10 ... +45 °C (-14 ... +113 °F)
 Power supply: 3V CR2032 (included)

| Height mm | Width mm | Depth mm | PK | Cat. No. |
|-----------|----------|----------|----|-----------|
| 104 | 58 | 19 | 1 | 6.264 198 |



3 Dräger Sampling Tubes

Using the Dräger activated charcoal tubes or silica gel tubes, hazardous substances in the air are collected using a suitable medium via adsorption or chemisorption. The sample is then analysed in the laboratory by means of various analytical methods such as gas chromatography (GC), high performance liquid chromatography (HPLC), UV-VIS photometry, or IR spectroscopy.

Dräger

| Type | Description | PK | Cat. No. |
|---------|--|-----|-----------|
| BiA 10 | Charcoal tubes | 10 | 9.620 414 |
| G 50 | Charcoal tubes | 50 | 7.616 384 |
| G 10 | Charcoal tubes | 10 | 9.620 415 |
| G 200 | Charcoal tubes | 200 | 6.081 355 |
| B/G 10 | Charcoal tubes | 10 | 9.620 416 |
| BiA 10 | Silica gel tubes | 10 | 9.620 417 |
| G 10 | Silica gel tubes | 10 | 9.620 418 |
| B/G 10 | Silica gel tubes | 10 | 9.620 419 |
| ORSA 5 | Diffusion sampler ORSA 5 | 5 | 6.050 155 |
| ORSA 25 | Diffusion sampler ORSA 25 | 25 | 6.080 611 |
| IPS | Isocyanate sampling set incl. analysis | 1 | 6.070 187 |



4 Gas Pump accuro®

Fast measurement with one hand: The Dräger-Tube pump accuro® allows you to use the established Dräger-Tubes® to take measurements under extreme conditions. The easy-to-use Dräger-Tubes® have already been calibrated and form a perfect unit with the Dräger-Tube pump.

Dräger

Gas pump Dräger accuro® set consisting of:
 Dräger-Tubes® pump accuro®, ready bag, with tube opener and spare part set

| Description | PK | Cat. No. |
|----------------------|----|-----------|
| Gas pump accuro® | 1 | 9.620 410 |
| Gas pump set accuro® | 1 | 9.620 411 |



Sample preparation/Air sampling and analysis

1

1 Dräger-Tubes®

The Dräger-Tubes® measuring system is the safe method for measuring pollutants in the soil, water and air. More than 500 substances can be measured in varying concentrations.

Dräger

The long-established principle of Dräger-Tubes® is still the same. A defined volume of gas/air must be pumped through the sampling tube. This can be achieved by using the Accuro® gas pump. On contact with the substance under test the reagent system contained in the tube reacts and displays a colour. The strength of the concentration of the substance is shown by the length of the colour band displayed and can be read directly from the scale. The Dräger-Tubes® sampling system provides accuracy, efficiency, quick and easy handling. Over 250 tubes are available on request for all substances and measuring fields. Further sampling devices, diffusion tubes for long-term measurements as well as sampling systems with activated carbon tubes, ORSA collector and TDS thermodesorption tubes are also available.

2


9.620 404

| Type | Measuring range | PK | Cat. No. |
|------------------------------|-----------------|----|--------------------|
| Acetone 100/b | 100 - 12000 ppm | 10 | 9.620 421 |
| Acetone 40/a | 400 - 800 ppm | 5 | 7.615 731 |
| Ammonia 0,25/a | 0.25 - 3 ppm | 10 | 6.056 774 |
| Ammonia 0,5%/a | 0.5 - 10 Vol.-% | 10 | 6.300 565 |
| Ammonia 2/a | 2 - 30 ppm | 10 | 9.620 404 2 |
| Ammonia 5/a | 5 - 70 ppm | 10 | 9.620 405 |
| Ammonia 5/b | 50 - 600 ppm | 10 | 9.620 424 |
| Petroleum hydrocarbons 10/a | 5 - 100 ppm | 10 | 9.620 426 |
| Petroleum hydrocarbons 100/a | 10 - 300 ppm | 10 | 6.076 365 |
| Benzene 0,25/a | 100 - 2500 ppm | 10 | 6.268 692 |
| Prussic Acid 0,5/a | 0.25 - 2 ppm | 10 | 9.620 449 |
| N-Butanol 10/a | 0.5 - 5 ppm | 10 | 6.287 566 |
| Chlorine 0,2/a | 5 - 50 ppm | 10 | 9.620 407 |
| Chlorine 0,3/b | 10 - 250 ppm | 10 | 6.051 690 |
| Ethanol 100/a | 3 - 30 ppm | 10 | 6.284 047 |
| Natural gas test | 250 - 2000 ppm | 5 | 6.077 329 |
| Acetic acid 5/a | 0.2 - 3 ppm | 10 | 6.900 409 |
| Hydrogen fluoride 0,5/a | 3 - 30 ppm | 10 | 6.206 032 |
| Formaldehyde 0,2/a | 0.3 - 5 ppm | 10 | 9.620 429 |
| | 100 - 3000 ppm | 10 | 6.206 032 |
| | 0.2 - 2.5 ppm | 10 | 9.620 429 |
| | 0.5 - 5 ppm | | |

3


9.620 408

4


6.077 398

| Type | Measuring range | PK | Cat. No. |
|--------------------------|-----------------------------|----|--------------------|
| Carbon dioxide 0.5 % / a | 0.5 - 10 vol.-% | 10 | 6.200 383 |
| Carbon dioxide 100 / a | 100-3,000 ppm | 10 | 9.620 408 3 |
| Carbon dioxide 0.1 % / a | 0.1 - 1.2 % by volume | 10 | 6.088 165 |
| | 0.5 - 6 % by volume | | |
| Carbon dioxide 5 % / a | 5 - 60 vol.-% | 10 | 6.050 554 |
| Carbon monoxide 2 / a | 2 - 60 ppm | 10 | 9.620 432 |
| | 23 - 300 ppm | | |
| Carbon monoxide 5 / c | 5-150 ppm | 10 | 9.620 409 |
| | 100-700 ppm | | |
| Carbon monoxide 8 / a | 8-150 ppm | 10 | 6.088 162 |
| Hydrocarbons 2 / a | 2 - 24 mg /m ³ | 10 | 6.240 701 |
| Mercaptan 0.1 / a | 0.1-2.5 ppm | 10 | 6.230 608 |
| | 3-15 ppm | | |
| Mercaptan 0.5 / a | 0.5 - 5 ppm | 10 | 6.079 278 |
| Mercaptan 20 / a | 20-100 ppm | 10 | 6.800 619 |
| Methanol 20 / a | 20 - 250 ppm | 10 | 6.284 102 |
| | 20 - 5000 ppm | | |
| Methyl bromide 0.1 / a | 5-50 ppm | 10 | 4.675 452 |
| Nitrous fumes 0.2 / a | 0.2-6 ppm | 10 | 6.266 890 |
| | 5-30 ppm | | |
| Nitrous fumes 2 / a | 2 - 50 ppm | 10 | 6.077 398 4 |
| | 5 - 100 ppm | | |
| Ozone 0.05 / b | 0.05-0.7 ppm | 10 | 9.620 434 |
| Ozone 10 / a | 20-300 ppm | 10 | 6.058 619 |
| Phenol 1 / b | 1 - 20 ppm | 10 | 9.620 437 |
| Phosphines 0.01 / a | 0.01 - 0.3 ppm | 10 | 9.620 438 |
| | 0.1 - 1 ppm | | |
| I-propanol | 50-4000 ppm | 10 | 6.287 567 |
| Mercury vapor 0.1 / b | 0.05 - 2 mg /m ³ | 10 | 9.620 439 |

12. Environmental-, soil-, water-, food analysis

Sample preparation/Air sampling and analysis

Dräger-Tubes®

More than 500 substances can be measured in varying concentrations. Dräger
 The long-established principle of Dräger-Tubes® is still the same. A defined volume of gas/air must be pumped through the sampling tube. This can be achieved by using the Accuro® gas pump. On contact with the substance under test the reagent system contained in the tube reacts and displays a colour. The strength of the concentration of the substance is shown by the length of the colour band displayed and can be read directly from the scale.

| Type | Measuring range | PK | Cat. No. |
|--------------------------|-----------------|----|-------------|
| Hydrochloric acid 0,2/a | 0.2 - 3 ppm | 10 | 7.622 794 |
| Hydrochloric acid 1/a | 1 - 10 ppm | 10 | 9.620 413 |
| Hydrochloric/Nitric acid | 1 - 10/15 ppm | 10 | 9.620 441 |
| Oxygen 5%/c | 5 - 23 Vol.-% | 10 | 9.620 448 |
| Sulphur dioxide 0,5/a | 0.5 - 5 ppm | 10 | 9.620 420 |
| | 1 - 25 ppm | | |
| Carbon disulphide 3/a | 3 - 95 ppm | 10 | 9.620 442 |
| Carbon disulphide 5/a | 5 - 60 ppm | 10 | 6.259 530 |
| Hydrogen sulphide 0,2%/a | 0.2 - 7 Vol.-% | 10 | 6.088 166 |
| Hydrogen sulphide 0,2/a | 0.2 - 5 ppm | 10 | 6.085 794 |
| Hydrogen sulphide 0,2/b | 0.2 - 6 ppm | 10 | 6.077 399 |
| Hydrogen sulphide 0,5/a | 0.5 - 15 ppm | 10 | 6.304 822 |
| Hydrogen sulphide 1/c | 1 - 20 ppm | 10 | 6.052 630 |
| | 10 - 200 ppm | | |
| Hydrogen sulphide 1/d | 1 - 20 ppm | 10 | 9.620 443 |
| | 10 - 200 ppm | | |
| Hydrogen sulphide 100/a | 100 - 2 000 ppm | 10 | 6.050 553 |
| Hydrogen sulphide 2%/a | 2 - 40 Vol.-% | 10 | 6.203 543 1 |
| Hydrogen sulphide 2/a | 20 - 200 ppm | 10 | 6.210 081 |
| Hydrogen sulphide 2/b | 2 - 60 ppm | 10 | 7.622 680 |
| Hydrogen sulphide 5/b | 5 - 60 ppm | 10 | 9.620 425 |
| Toluene 5/b | 50 - 300 ppm | 10 | 9.620 446 |
| Trichloroethylene 2/a | 2 - 50 ppm | 10 | 9.620 447 |
| | 20 - 250 ppm | | |
| Water vapour 0,1 | 1 - 40 mg/l | 10 | 6.050 757 2 |



3 Test gas in disposable bottles

According to ISO 9002. DOT39 and EN12205. Dräger
 Control valve not included, please order separately.



Attention

H phrases: H280

| Type | Concentration | Capacity | PK | Cat. No. |
|--|---------------------------------------|---------------|----|-----------|
| Hydrogen sulfide | 20 ppm | 60 l, 35 bar | 1 | 6.253 813 |
| Methane / Hydrogen sulfide / Carbon dioxide | 2,5 Vol.% / 15 ppm / 2 Vol.% | 60 l, 35 bar | 1 | 7.618 098 |
| Hydrogen sulfide / Carbon monoxide / Carbon dioxide | 2,5 Vol.% / 15 ppm / 50 ppm / 2 Vol.% | 60 l, 35 bar | 1 | 7.655 788 |
| Sulfur dioxide | 10 ppm | 60 l, 35 bar | 1 | 7.661 308 |
| Methane | 2 Vol.% | 112 l, 70 bar | 1 | 7.661 767 |
| Standard control valve, 0.5 l per min | | | 1 | 7.654 036 |
| Pressure reducer On Demand 2001 for Gas detectors with internal pump | | | 1 | 7.660 299 |



We can supply this
 manufacturer's
 whole
 product range !



Sample preparation/Air sampling and analysis

1


7.629 381

Dräger Aerotest Alpha

The Dräger Aerotest Alpha allows the quality of breathing air supplied by a compressor or compressed gas cylinder to be determined. Use of the test system performs a reliable check in accordance with the breathing air standard EN 12 021.

Dräger

Dräger Aerotest Alpha comprising of 1 pressure reducer, measuring device for 4 tubes, impactor adapter, coupling, barbed nipple, stopwatch, tube opener Dräger TO 7000, bubble test hose, pack of 5 sintered filters, instruction for use, transport case (black)

Dräger Aerotest Alpha, with Dräger Tubes:

- Dräger Aerotest Alpha
- + box of 10 Dräger Oil Impactors,
- + box of 10 Dräger-Tubes carbon dioxide (CO₂) 100/a-P,
- + box of 10 Dräger-Tubes carbon monoxide (CO) 5/a-P,
- + box of 10 Dräger-Tubes water vapor (H₂O) 20/a-P

Specifications

| | |
|---|--------------------|
| Dimensions of carrying case (L x W x H) | 350 x 300 x 85 mm |
| Weight, including contents | approx. 3.0 kg |
| Max. supply pressure | 15 bar |
| Supply pressure (set on delivery) | 3.0 bar |
| Pressure gauge | 0.3 to 15 bar |
| Connection for compressed air supply | barbed nipple 9 mm |
| Flow rate | 0.2 and 4.0 l/min |

| Description | PK | Cat. No. |
|--|----|--------------------|
| Dräger Aerotest Alpha | 1 | 6.241 227 |
| Dräger Aerotest Alpha, with Dräger Tubes | 1 | 7.629 381 1 |
| Oil-impactor | 10 | 6.241 225 |
| Carbon monoxide 5/a-P | 10 | 6.801 977 |
| Carbon dioxide 100/a-P | 10 | 6.801 978 |
| Water Vapor 5/a-P | 10 | 6.087 703 |
| Water vapour 20/a-p | 10 | 6.801 979 |
| Oil 10/a-P | 10 | 6.078 279 |

2


9.620 470

Automatic tube pump Dräger X-act® 5000

The automatic tube pump Dräger X-act® 5000 is the first all-in-one solution designed for measurements with Dräger short-term tubes and for sampling tubes and systems. Ease of operation and a high degree of reliability compliment the measurement and sampling of gases, vapors and aerosols.

Dräger

- New Pump Concept
- Simplicity of Operation, even with protection gloves
- Automatic Transfer of Measurement Parameters with barcode reader
- Measurement in Technical Gases
- Direct Settings for Sampling
- Simple and intuitive menu structure

Specifications:

| | |
|--------------------------------|--|
| Number of strokes: | adjustable, 1 to 199 strokes |
| Stroke volume: | 100 ml |
| Sample taking | |
| Flow rate range: | 0.1 to 2.0 L/min Resolution 0.1 to 1.0 L/min: 0.1 L/min ±5 % Resolution 1.0 to 2.0 L/min: 0.2 L/min ±5 % |
| Sampling time: | adjustable, up to 12 hours, depending on flow rate Resolution in steps of 15 minutes (default) or 1 minute |
| Display: | two parts: segment and matrix |
| Menu languages: | Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Polish, Spanish, Swedish |
| Dimensions (H x W x D): | approx. 175 mm x 230 mm x 108 mm |
| Weight (without battery pack): | approx. 1.6 kg |
| Temperature during storage: | -20 °C to 55 °C |
| Temperature during operation: | 5 °C to 40 °C |
| Humidity: | 0 to 95 % r. h., non-condensing |
| Pressure: | 700 to 1300 hPa |

| Description | PK | Cat. No. |
|---|----|--------------------|
| Dräger X-act® 5000, shoulder strap without power supply | 1 | 9.620 470 2 |
| Rechargeable Battery NiMH, T4 | 1 | 9.620 471 |
| Wall-Wart Charger 100 - 240 VAC (worldwide) | 1 | 9.620 474 |
| Car Charger 12 / 24 V | 1 | 9.620 475 |