

Oil-free compressed air for the medical and laboratory market





### Dürr Technik

Experience. Precision. Quality.

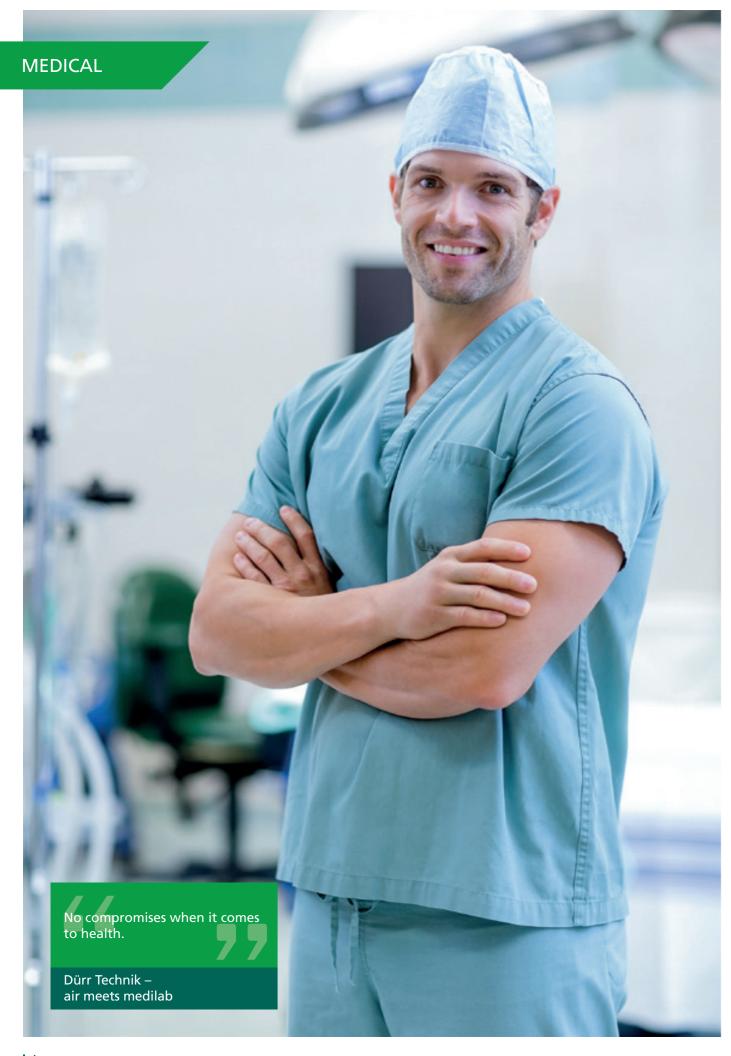
Dürr Technik is part of the global Dürr group of companies. With more than 70 years' experience in both the dental and medical sectors we have acquired comprehensive expertise in a wide range of applications.

Our headquarters are located in Bietigheim-Bissingen, one of the most innovative industrial regions of Germany, and its here that we develop and manufacture our products.

Motivated employees, state of the art production facilities as well as certified quality management all offer optimal conditions to meet even the highest customer requirements.

We can advise our customers according to their needs and also offer tailor-made solutions.

Dürr Technik Quality Made in Germany







# Compressed air for the medical sector Dry. Clean. Silent.

Many medical applications require high quality dry air, but as in moist air harmful bacteria can build up. In combination with drying installations our oil-free compressors prevent bacteria build-up and moreover protect sensitive instruments against corrosion, sediments and other damage.

Oil-free compressors from Dürr Technik operate economically:

- Continuous operation S1 also with membrane dryer
- Almost maintenance-free
- Long service life
- User friendly operation
- Energy efficient motor design

Soundproofed compressor stations provide especially comfortable working conditions.

Dürr Technik, Germany is certified according to the medical directive DIN EN ISO 13485. Our management system corroborates the process reliability of our operative workflow.











### Compressor technology in the medical sector

Various applications

Compressed air is equally indispensable in the medical sector and in the laboratory. The silent, compact, oil-free compressors of Dürr Technik excel with their flexibility and efficiency.

Besides the centralized compressed air supply, the compressors of Dürr Technik perform many different tasks in the realm of decentralized air supply.

Several application examples are shown in the chart.



SICOLAB med

Ventilating air compressors



2 Shock wave therapy

Drying of endoscopes







# Compressed air in laboratory application Wide range of uses

Analyses, experiments or quality controls, these are only some of the laboratory applications in which oil-free compressed air plays a major role, because oil vapour affects valves, blocks nozzles, contaminates air or falsifys measuring results. Oil-free compressors are an advantage for the reliable functioning of instruments and measuring devices as well as for reliable results.

Dürr Technik compressors comply with the standard ISO 8573-1 for air quality up to the class 1:3:1. For this reason they are extremely suitable for sensitive laboratory applications.

Not every laboratory has its own compressor room. Therefore only silent compressors can be used directly at the workplace.

The compact dimensions are ideal. In some cases the units can even be placed under the table in the laboratory.

- Auto-samplers
- Blood analysis
- CO<sub>2</sub>, DCS, COT analysis
- Dosage
- ELSD detectors
- Foodstuff inspection
- Gas chromatography: FID, FPD
- LCMS
- Nitrogen generators
- Particle measurement
- Rheometer
- Spectroscopy: AA, NMR, FT-IR

Application examples for compressed air in the laboratory







### SICOLAB mini

### Compact and soundproofed

The SICOLAB mini from Dürr Technik is especially silent. The oil-free, plug-and-play compressor unit is housed in a ventilated sound absorbing box.

The compact SICOLAB mini models are light weight and portable. Owing to their maintenance free components the oil-free compressors made by Dürr Technik are an economically attractive solution. Comfortable mobility is granted by a carrying handle as well as an optionally available trolley. A mains plug and a quick coupling for the compressed air connection directly at the housing ensures simple plug-and-play installation.

The model SICOLAB mini Endo is especially suitable for endoscope drying. This unit is fitted with a fine filter, a spiral coiled hose and a compressed air pistol, as standard features.



### Technical data SICOLAB mini

Туре	Delivery rate at 5 bar	Nominal pressure PN	Noise level at PN	Volume of vessel	Nominal voltage	Frequency	Dimensions LxWxH	Weight
	(I/min)	(bar)	dB (A)	(1)	(V)	(Hz)	(mm)	(kg)
SICOLAB 025 mini	8	7	48	2	230	50	396x347x321	15
SICOLAB 025 mini	9	7	50	2	230	60	396x347x321	15
SICOLAB 038 mini	20	7	49	2	230	50	396x347x321	16
SICOLAB 038 mini	23	7	51	2	230	60	396x347x321	16
SICOLAB 038 mini	23	7	52	2	115	60	396x347x321	16
SICOLAB 062 mini	41	7	53	2	115	60	396x347x321	20
SICOLAB 062 mini	36	7	50	2	230	50	396x347x321	20
SICOLAB mini Endo	34*	1	50	2	230	50	396x347x321	16
SICOLAB mini Endo	34*	1	52	2	230	60	396x347x321	16

\* Delivery rate at 1 bar





### **SICOLAB**

Silent. Compact. Mobile.

Due to maximum performance in whisper mode the SICOLAB is very much at home in laboratory operations.

Soundproofed and low in vibration the SICOLAB supplies the needed oil-free compressed air directly to the workplace, without interfering with the usual workflow or disturbing the concentration of the lab workers.

The innovative operating concept and the specific mobility with wheels and carrying handles ensure maximum flexibility. A membrane dryer and an activated carbon filter and fine filter can be integrated optionally.



Туре	Delivery rate at 5 bar	Nominal pressure PN	Noise level at PN	Volume of vessel	Nominal voltage	Frequency	Dimensions LxWxH	Weight	Compressed air class according to ISO 8573-1*
	(l/min)	(bar)	dB (A)	(1)	(V)	(Hz)	(mm)	(kg)	130 8373-1
SICOLAB 062	37	7	48	25	230	50	510x580x653	66	4-x-1
SICOLAB 100	70	7	52	25	230	50	510x580x653	76	4-x-1
SICOLAB 200	145	7	54	25	230	50	510x580x653	93	4-x-1
SICOLAB 062M	32	7	48	25	230	50	510x580x653	68	4-3-1
SICOLAB 062M	36	7	49	25	115	60	510x580x653	77	4-3-1
SICOLAB 100M	59	7	52	25	230	50	510x580x653	78	4-4-1
SICOLAB 100M	67	7	53	25	115	60	510x580x653	89	4-4-1
SICOLAB 200M	122	7	54	25	230	50	510x580x653	95	4-5-1
SICOLAB 062MF	32	7	48	25	230	50	510x580x653	68	1-3-1
SICOLAB 100MF	59	7	52	25	230	50	510x580x653	78	1-4-1
SICOLAB 200MF	122	7	54	25	230	50	510x580x653	95	1-5-1
SICOLAB 062MFA	32	7	48	25	230	50	510x580x653	68	1-3-1
SICOLAB 100MFA	59	7	52	25	230	50	510x580x653	78	1-4-1
SICOLAB 200MFA	122	7	54	25	230	50	510x580x653	95	1-5-1

M = Models with membrane dryer MF = Models with membrane dryer and filter size 0,01  $\mu$ m MFA = Models with membrane dryer, filter size 0,01  $\mu$ m and activated carbon filter



<sup>\*</sup> Better compressed air class on request.

# OIL-FREE COMPRESSOR STATIONS





### Ready for connection compressor stations Meets all requirements

In addition to our standard devices, Dürr Technik offer the possibility to configure oil-free compressor stations in a modular way – from delivery rates between 25 and 600 l/min and receiver sizes from 3-90 litres.

We will be pleased to advise you in all details.

You will find a selection of standard models in the technical table under www.duerr-technik.com.



Туре	Delivery rate at 5 bar	Nominal pressure PN	Noise level at PN	Volume of vessel	Nominal voltage	Frequency	Dimensions LxWxH	Weight
	(l/min)	(bar)	dB (A)	(1)	(V)	(Hz)	(mm)	(kg)
without dryer								
UA-025AK	8	7	55	3	230	50	320x315x340	12
WA-038AK	15	7	57	10	230	50	550x190x430	17
WA-062AK	35	7	59	10	230	50	550x180x400	20
WAG-132AKT	83	7	71	10	230	50	545x276x520 (without trolley)	34
TA-100AK	73	7	68	25	230	50	615x355x615	36
HA-200K	140	7	69	55	230	50	920x305x685	62
PA-200AK	140	7	69	90	230	50	1040x350x845	78
HB-304K	248	7	77	55	400	50	920x355x655	75
P2B-304	496	7	74	90	400	50	1020x760x620	140
with dryer								
TA-065M	34	7	68	25	230	50	615x435x670	36
TBG-132M	63	7	71	25	400	50	610x475x665	38
TA-100M	59	7	68	25	230	50	615x435x670	52
HA-200M	122	7	69	55	230	50	925x450x720	70
HB-304M	215	7	77	55	400	50	920x480x720	86
P2B-304M	430	7	74	90	400	50	1020X760x620	143

## Dry and clean compressed air Due to efficient technology

The membrane drying system of Dürr Technik supplies fully automated dry and clean air according to ISO 8573-1. The dried air is stored directly in the pressure receiver.

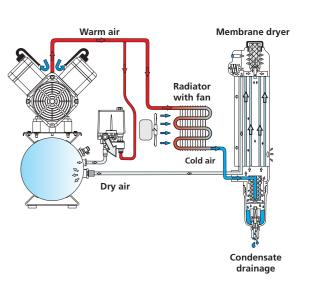
Our membrane dryer achieves this through its:

- Economical purge air consumption
- 100% continuous running free of maintenance filter exchange only once a year
- Standard dew point suppression by 35 Kelvin, this can be adjusted to suit application
- Patented pressure relief valve and water separator with integrated automatic capacitor
- Long lifespan even at pressure pulsations

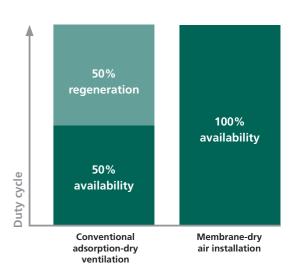
The insides of the Dürr Technik pressure receivers starting from 10 litres upwards are protected against corrosion by a coating containing antibacterial silver particles.



#### Functioning of a compressor station with dryer



## Performance comparison of one-chamber drying systems and membrane dryers



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