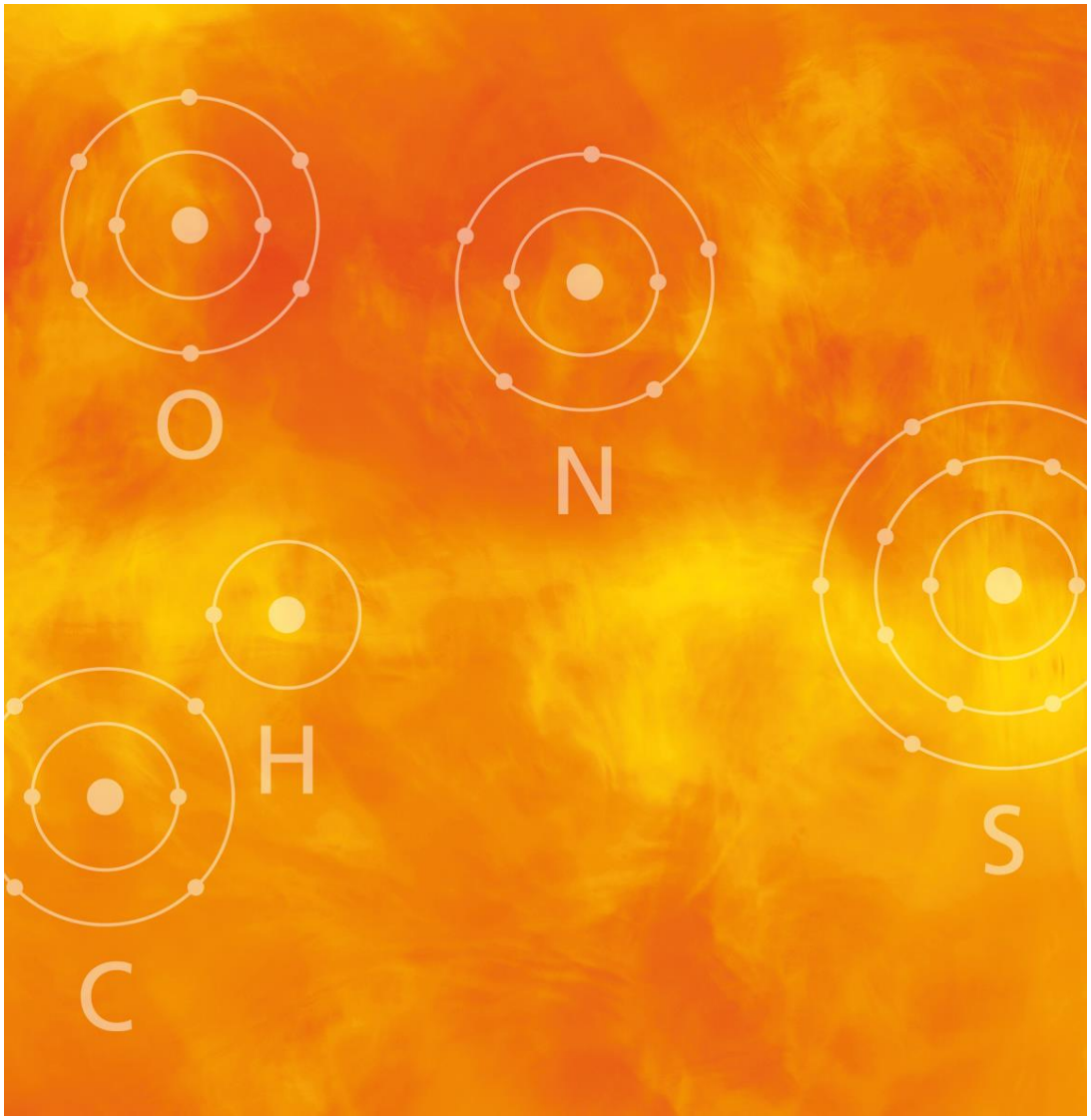
Manual

Pre-Installation Guide



Translation

ELTRA®
ELEMENTAL ANALYZERS

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1 Pre-installation guide ELEMENTRAC CS-i

Following requirements apply, when installing the analyzer:

Carrier gas	Oxygen 99.5% pure; 2 - 4bar
Compressed air	4 – 6bar, oil and grease free
Mains power supply	230VAC ±10%, 50/60Hz; 16A fuse

Analyzer dimension	520 x 840 x 750mm (WHD)
Analyzer weight	approx. 150kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

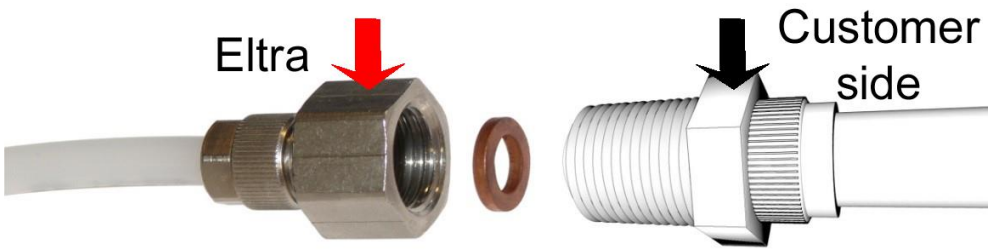

Fig. 1: Carrier gas tube

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

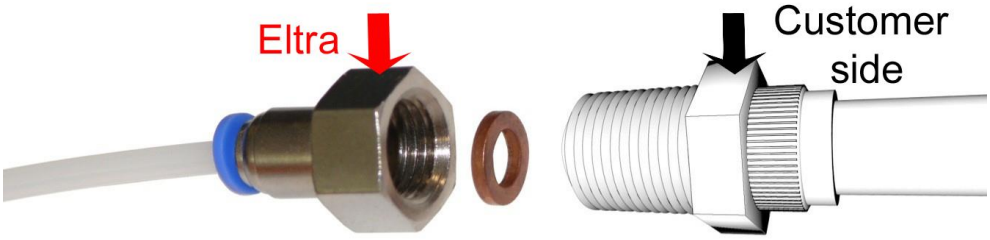

Fig. 2: Compressed air tube

NOTICE
"**Internet connection:**
For fast online support connect the analyzer PC to the internet."

2 Pre-installation guide ELEMENTRAC CS-d

Following requirements apply, when installing the analyzer:

Carrier gas	Oxygen 99.5% pure; 2 - 4bar
Compressed air	4 – 6bar, oil and grease free
Mains power supply:	
Analyzer:	230VAC ±10%, 50/60Hz; 16A fuse (CEE-Plug 230V, 16A)

Resistance Furnace:	230 VAC ±10%, 50/60 Hz; 20A fuse CEE-Plug 230V, 32A

Analyzer dimension	560 x 780 x 600 mm (WHD)
Furnace dimension	340 x 525 x 600 mm (WHD)
Analyzer weight	approx. 140 kg.
Furnace weight	approx. 38 kg.

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.

Connections for carrier gas:

The supplied tubes carry a connector with G¼" inner diameter ".

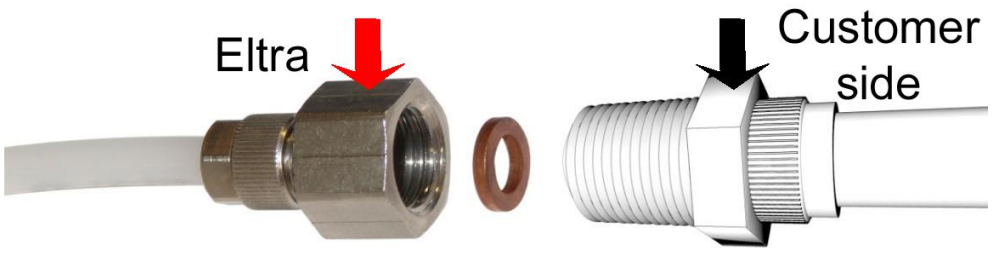

Fig. 3: Carrier gas tube

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

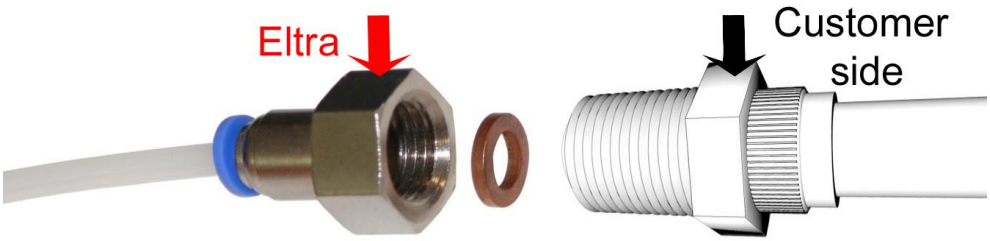

Fig. 4: Compressed air tube

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3 Pre-installation guide ELEMENTRAC ONH-p, ON-p and OH-p

The following prerequisites must be prepared by the customer before installation on site.

Compressed air: 4 – 6bar, oil and grease free
Carrier gas: Pure helium 99.995 %; 2–4 bar, for ONH-p and ON-p
Pure nitrogen 99.995 %; 2–4 bar, for ONH-p and OH-p
Pure argon 99.995 %; 2–4 bar; optional

3-phase version mains voltage supply:
400 V AC ± 10 %, L1=32A, L2=30A, L3=0A, 50/60 Hz
(3L+N+PE, 6h, 32A acc. to IEC 60309)

1-phase version mains voltage supply:
230 V AC ± 10 %; L=63A, 50/60 Hz
(L+N+PE, 6h, 63A acc. to IEC 60309)

Dimensions of the analyzer:	570 x 770 x 630mm (WHD)
Weight of the analyzer:	161kg
Sound pressure level:	55dB(A)

– The scales need a vibration-free installation site.
– The analyzer needs a sufficiently strong and stable desk as installation site.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

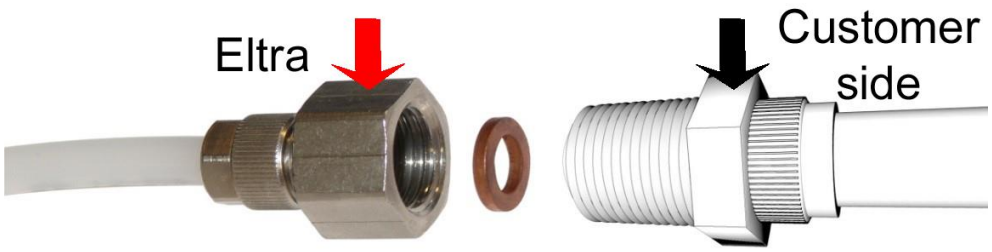

Fig. 5: Carrier gas tube

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

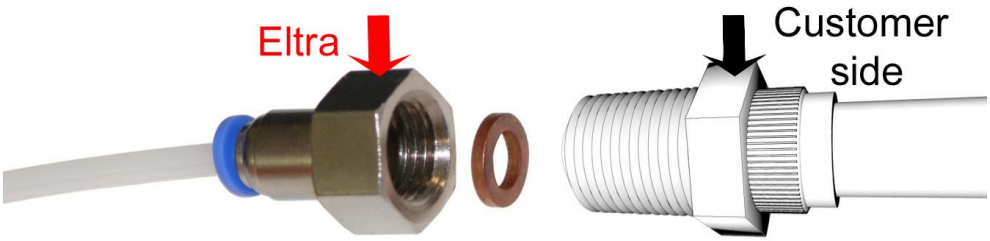

Fig. 6: Compressed air tube

Water connection:
Use tap water for cooling, with 4bar (60psi) pressure,
The tubes supplied together with the analyzer, carry a connector with G¾" inner diameter.

Fig. 7: Water connection

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4 Pre-installation guide CS 580

Following requirements apply, when installing the analyzer:

Carrier gas	Oxygen 99.5% pure; 2 - 4bar
Mains power supply	230VAC ±10%, 50/60Hz; 20A fuse (L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension	560 x 780 x 600mm (WHD)
Analyzer weight	approx. 75kg
TIC-module dimension	340 x 525 x 600mm (WHD)
TIC-module weight	approx. 28kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

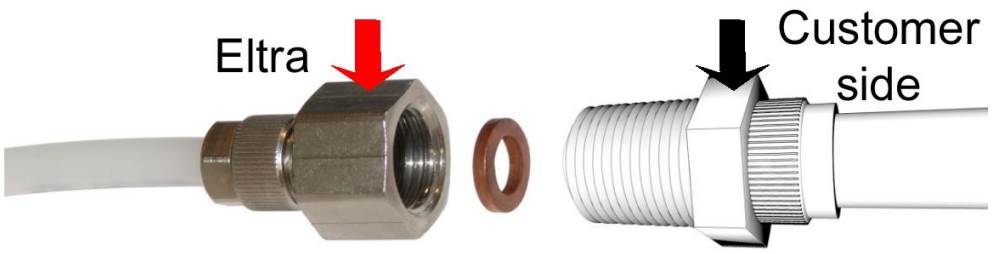

Fig. 8: Carrier gas tube

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5 Pre-installation guide CHS 580

Following requirements apply, when installing the analyzer:

Carrier gas	Oxygen 99.5% pure; 2 - 4bar
Mains power supply	230VAC ±10%, 50/60Hz; 20A fuse (L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension	560 x 780 x 600mm (WHD)
Analyzer weight	approx. 75kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

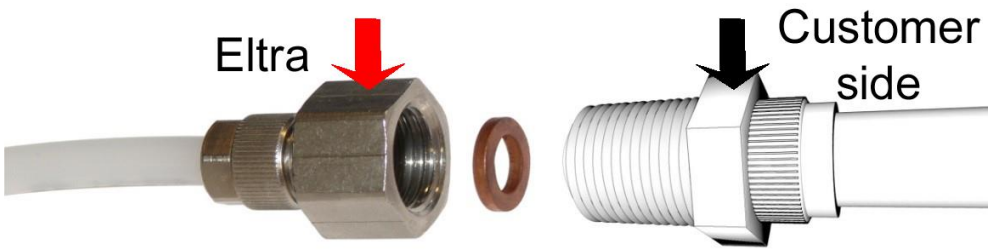

Fig. 9: Carrier gas tube

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6 Pre-installation guide CS 580A (Helios)

Following requirements apply, when installing the analyzer:

Compressed air	4 – 6bar, oil and grease free
Carrier gas	Oxygen 99.95 % pure; 2 - 4bar
Mains power supply	230VAC ±10%, 50/60Hz; 20A fuse (L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension	550 x 1000 x 600mm (WHD)
Loader dimension	850 x 350 x 450mm (depending on version) (WHD)
Analyzer weight	approx. 90kg
Loader weight	approx. 55kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

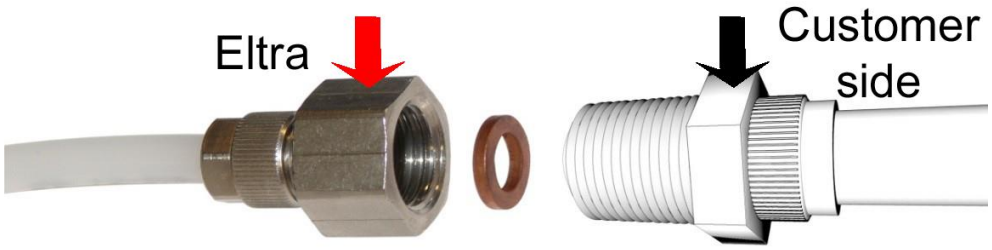

Fig. 10: Carrier gas tube

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

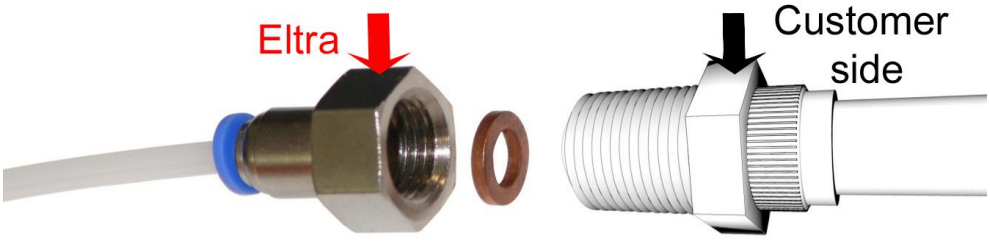

Fig. 11: Compressed air tube

NOTICE
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7 Pre-installation guide CHS 580A (CHS-Helios)

Following requirements apply, when installing the analyzer:

Compressed air	4 – 6bar, oil and grease free
Carrier gas	Oxygen 99.95 % pure; 2 - 4bar
Mains power supply	230VAC ±10%, 50/60Hz; 20A fuse (L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension	550 x 1000 x 600mm (WHD)
Loader dimension	850 x 350 x 450mm (depending on version) (WHD)
Analyzer weight	approx. 90kg
Loader weight	approx. 55kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

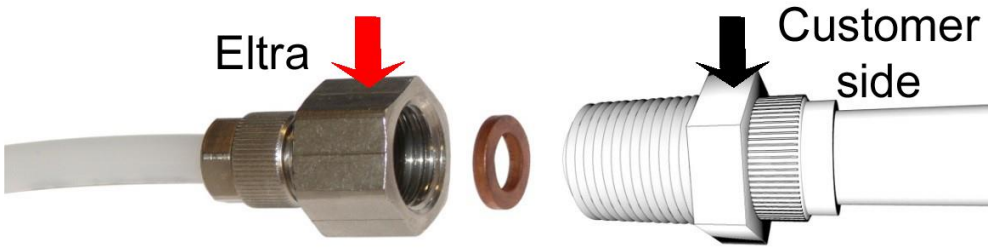

Fig. 12: Carrier gas tube

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

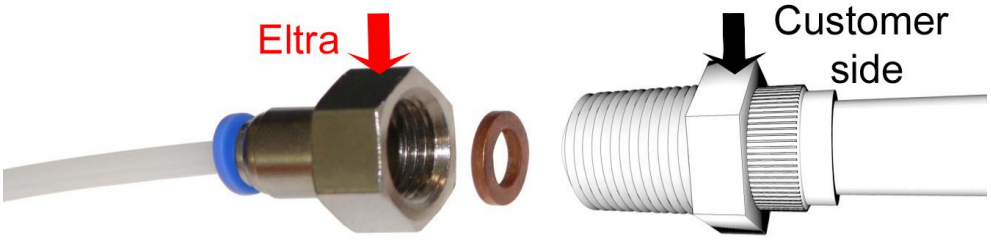

Fig. 13: Compressed air tube

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8 Pre-installation guide CW 800

Following requirements apply, when installing the analyzer:

Carrier gas	Nitrogen 99.995% pure; 2 - 4bar
Mains power supply	230VAC ±10%, 50/60Hz; 20A fuse (L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension	560 x 780 x 600mm (WHD)
Analyzer weight	approx. 75kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

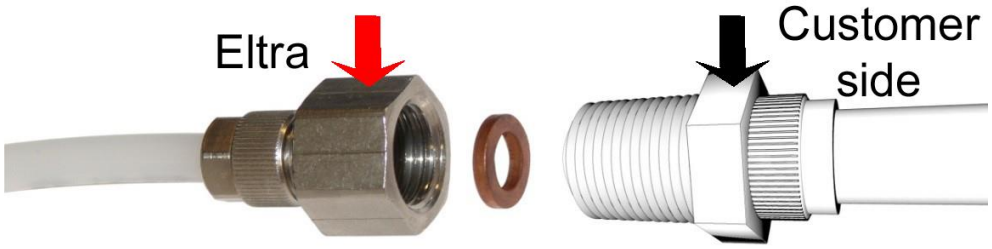

Fig. 14: Carrier gas tube

NOTICE
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9 Pre-installation guide CW Multiphase

Following requirements apply, when installing the analyzer:

Carrier gas	Oxygen / Alternative gas 99.99% pure; 2 - 4bar
Compressed air	4 – 6bar, oil and grease free
Mains power supply	230VAC ±10%, 50/60Hz; 20A fuse (L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension	560 x 780 x 600mm (WHD)
Analyzer weight	approx. 65 kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

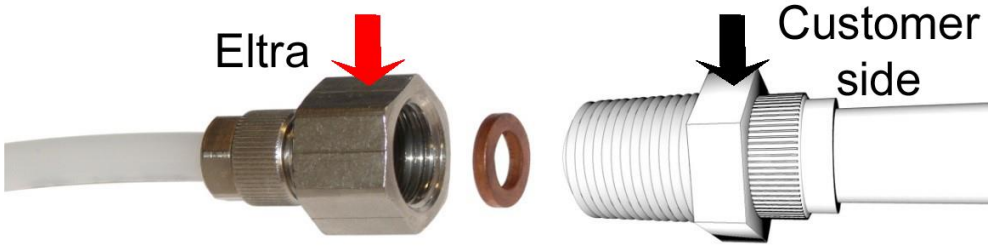

Fig. 15: Carrier gas tube

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

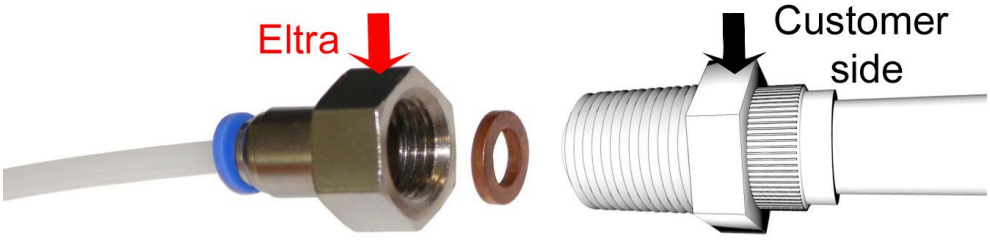

Fig. 16: Compressed air tube

NOTICE
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10 Pre-installation guide SC 800

Following requirements apply, when installing the analyzer:

Carrier gas:	Oxygen 99.995% pure; 2 - 4bar
Main power supply:	230VAC ±10%, 50/60Hz; 16A fuse.
	(L+N+PE, 6h, 32A acc. to IEC 60309)

Analyzer dimension:	560 x 780 x 600mm (WHD)
Analyzer weight:	approx. 65kg

– It is important to install the instrument on a stable place
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

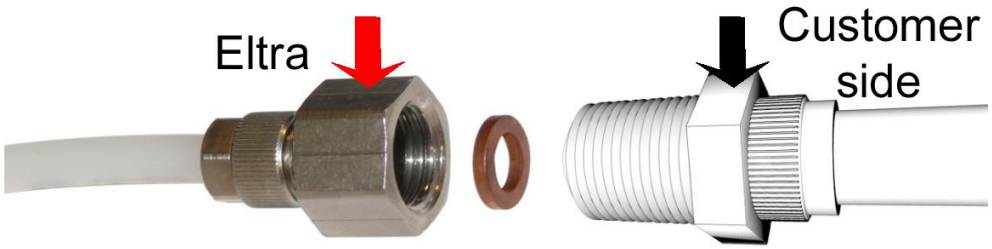

Fig. 17: Carrier gas tube

NOTICE
If a gas calibration is performed, the above-mentioned carrier gas hose is used.

NOTICE
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11 Pre-installation guide H 500

Following requirements apply, when installing the analyzer:

Carrier gas	Nitrogen 99.995% pure; 2 - 4bar
Mains power supply	230VAC ±10%, 50/60Hz; 16A fuse
	CEE-Plug 230V, 16A

Analyzer dimension	750 x 510 x 600mm (WHD)
Analyzer weight	approx. 40kg

– It is important to install the instrument on a stable place.
– The balance should rest on a vibration free support.
– The analyzer requires a connection to an exhausting system or to the outside.

Connections for carrier gas:
The supplied tubes carry a connector with G¼" inner diameter ".

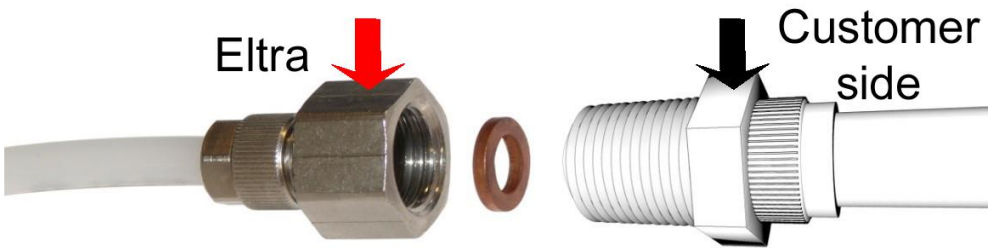

Fig. 18: Carrier gas tube

NOTICE
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12 Pre-installation guide TGA Thermostep, TGA Thermostep ML

Following requirements apply, when installing the analyzer:

Carrier gas	Oxygen 99.5% pure; 2 - 4bar
	Nitrogen 99.5% pure; 2 - 4bar
Compressed air	5 – 6bar, oil and grease free
Mains power supply	230VAC ±10%, 50/60Hz; 25A Fuse
	(L+N+PE, 6h, 32A acc. to IEC 60309)

Technical specifications

Exhausting blower throughput – 3,8m³/min (maximum)
Exhausting air temperature < 70°C (depending on analysis)
Electrical power consumption ~ 5,5KW (about 24A / 230VAC)
Carousel material – Steel 2.4858

Analyzer dimension:	56 x 72 x 53 (WHD closed)
Analyzer dimension:	56 x 85 x 92 (WHD opened)
Analyzer weight:	65kg

– It is important to install the instrument on a stable place.

Ventilation

Thermostep must be vented to an external exhaust.

- The exhausting blower is included in delivery, as well the alumina hose (diameter 100mm)
- To be connected to exhausting system or to outside

⚠ *CAUTION*

- For connections (gas, electrical and exhausting) the table needs a minimum depth of 90 cm.
- Additional space is needed for gas and exhaust installations in Laboratory.

Connections for carrier gas for TGA:

The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

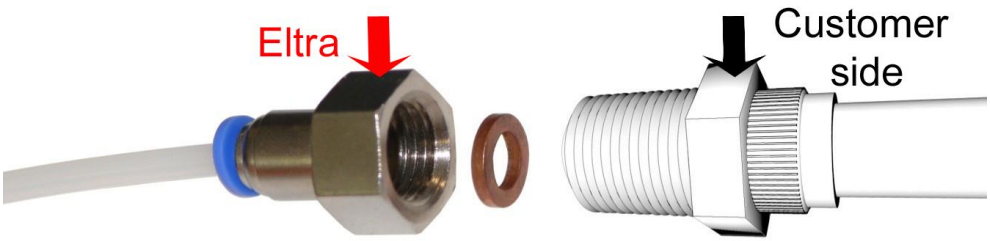

Fig. 19: Carrier gas TGA

Connections for compressed air:
The tubes supplied together with the analyzer, carry a connector with G¼" inner diameter.

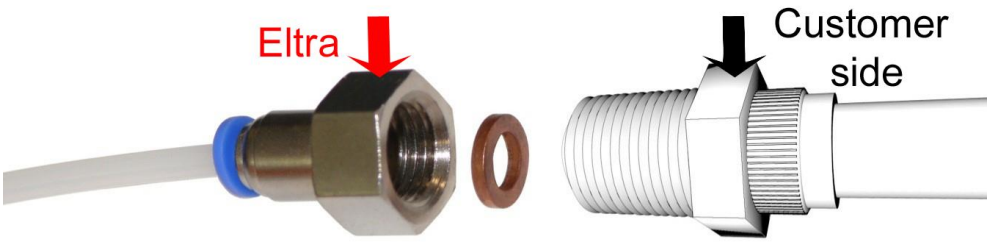

Fig. 20: Compressed air tube

NOTICE
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13 Accessories

13.1 Pre-installation guide Autoloader ELEMENTRAC CS-i/CS-d

Mains power supply	230VAC ±10%, 50/60Hz; 16A fuse CEE-Plug 230V, 16A

Loader dimensions:
Version 36p: 500x250x460mm (WHD)
Version 130p: 900x500x460 (WHD)

13.2 Pre-installation guide Loader CS 580A (Helios)

Loader dimensions:
Version 36p: 500x250x460mm (WHD)
Version 130p: 900x500x460 (WHD)

13.3 Pre-installation guide TIC Module

Mains power supply	230VAC ±10%, 50/60Hz; 16A fuse CEE-Plug 230V, 16A

Dimensions:	340 x 525 x 600mm (WHD)
Weight:	approx. 28kg

13.4 Pre-installation guide Gas Purification Furnace GRO18

Mains power supply 230VAC ±10%, 50/60Hz; 16A fuse
CEE-Plug 230V, 16A

Dimensions: 230 x 300 x 780 mm (WHD)
Weight: approx. 19kg

13.5 Pre-installation guide HTF 540

General specifications:
Furnace temperature: up to 1550°C
Mains power supply: 230VAC ±10%, 50/60Hz, 20A fuse
(L+N+PE, 6h, 32A acc. to IEC 60309)

Dimensions: 340 x 525 x 600mm (WHD)
Weight: approx. 38kg

– It is important to install the instrument on a stable place.

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