WITT Gas filter
with filter inserts of bronze or stainless steel.

**Benefits**
- ultra fine filtering out of mechanical impurities through bronze or stainless steel filter inserts
- broad range of uses – compatible with many technical gases
- change of filter possible while installed due to userfriendly design
- high flowrate thanks to flow maximising design (see flow diagram on the back side)
- condensate can be collected and removed using condensate drain
- easy to install thanks to large choice of connections
- reliable filtering performance increases service life of downstream fittings and equipment
- meets all the requirements of EIGA Guideline IGC Doc 13/12/E "Oxygen Pipeline and Piping Systems"
- pre-cleaned to EIGA Guideline IGC Doc 13/12/E, and ready for $O_2$
- withstands maximum line pressure (40 bar) even if it becomes clogged

**Operation / Usage**
- particularly well suited to use in laser systems
- Gas filter are designed for installation in pipelines
- the gas purifiers with condensate drain must be installed vertically

**Maintenance**
- the condensate should be drained at regular intervals
- the filter inserts must be checked regularly and replaced if necessary

**Approvals**
Company certified according to ISO 9001 and PED 2014/68/EU Module H
CE-marked according to:
- PED 2014/68/EU
Cleaned for Oxygen Service according to:
- EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems
GAS FILTER 77

Gas filter with filter inserts of bronze

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<tbody>
<tr>
<td>Oxygen (O)</td>
<td>Housing - Brass; Filter - Bronze; Seal - Elastomer</td>
<td>-30 °C to +60 °C</td>
<td>3.0</td>
<td>both sides G 3/4 F</td>
<td>5 µm</td>
<td>077-012</td>
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<tr>
<td>Ethylene (E)</td>
<td></td>
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<td>50 µm</td>
<td>077-010</td>
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<tr>
<td>LPG (P)</td>
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<td>Natural gas (M)</td>
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<td>Hydrogen (H)</td>
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<td>Town gas (C)</td>
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<tr>
<td>Compressed air (D)</td>
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</table>

Replacement filter inserts of bronze 5 µm
Replacement filter inserts of bronze 50 µm

Further benefits for gas filter 77 (bronze)
- Certification by BAM (German Federal Institute for Materials Research and Testing) for O₂ service
- No velocity limitation, including during commissioning “blow-out” testing
- Not subject to a minimum thickness requirement (per Appendix D of EIGA Guideline IGC Doc 13/12/E)

Installation-kit (Order-No. 966.031300)
for a complete installation, enabling active monitoring of filter contamination by means of differential pressure consisting of:

<table>
<thead>
<tr>
<th>Position</th>
<th>Description</th>
<th>Order-No.</th>
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</thead>
<tbody>
<tr>
<td>002</td>
<td>screwed coupling</td>
<td>952015100</td>
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<tr>
<td>003</td>
<td>O-ring</td>
<td>7901-655</td>
</tr>
<tr>
<td>004</td>
<td>coupling female - female</td>
<td>100313135</td>
</tr>
<tr>
<td>005</td>
<td>screwed coupling</td>
<td>100005031</td>
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<tr>
<td>006</td>
<td>O-ring</td>
<td>7901-656</td>
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<tr>
<td>007</td>
<td>washer</td>
<td>801914801</td>
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<tr>
<td>008</td>
<td>O-ring 4.47x1.78</td>
<td>7901-654</td>
</tr>
</tbody>
</table>
GAS FILTER 77

77 (bronze)
5 µm

Conversion factors:
- Acetylene: x 1.04
- Butane: x 0.68
- Natural Gas: x 1.25
- Methane: x 1.33
- Propane: x 0.80
- Oxygen: x 0.95
- Town gas: x 1.54
- Hydrogen: x 3.75

Flow diagram for air (20 °C / 68 °F)

Inlet pressure: \( P_v \) [bar]

Standard volume flow [Nm³/h]

(1013 mbar / 14.7 psi, 0 °C / 32 °F)
Gas filter with filter inserts of stainless steel

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<tbody>
<tr>
<td>Acetylene (A) 1.5</td>
<td>Housing – Brass; Filter – Stainless steel; Seal – Elastomer</td>
<td>-40 °C to +60 °C</td>
<td>2.77</td>
<td>both sides G 3/4 F</td>
<td>7-10 µm</td>
<td>077-004</td>
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<tr>
<td>Carbon dioxide 25.0</td>
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<td>Ethylene (E)</td>
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<td>Natural gas (M) 50.0</td>
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<td>Hydrogen (H)</td>
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<tr>
<td>Oxygen (O) 30.0</td>
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</table>

Installation-kit (Order-No. 966.098000)
for a complete installation, enabling active monitoring of filter contamination by means of differential pressure consisting of:

- Replacement filter inserts of stainless steel 7-10 µm
- Replacement filter inserts of stainless steel 40 µm

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**Position** | **Description** | **Order-No.**
--- | --- | ---
002 | screwed coupling | 952015100
003 | O-ring | 7901-224
004 | coupling female - female | 100313135
005 | screwed coupling | 100005031
006 | O-ring | 7901-039
007 | washer | 801914801
008 | O-ring 4.47x1.78 | 7901-034
GAS FILTER 77

77 (stainless steel)
40 µm

Conversion factors:
- Acetylene: x 1.04
- Butane: x 0.68
- Natural Gas: x 1.25
- Methane: x 1.33
- Propane: x 0.80
- Oxygen: x 0.95
- Town gas: x 1.54
- Hydrogen: x 3.75

Flow diagram for air (20 °C / 68 °F)

Inlet pressure: $P_i$ [bar]

Standard volume flow $[\text{Nm}^3/\text{h}]$

(1013 mbar / 14.7 psi, 0 °C / 32 °F)