



TGF11 Tracer Gas Filler

Controlled tracer gas filling and evacuating



Do not miss leaks due to faulty tracer gas handling

For reliable leak testing in production it is critical to have the entire test object filled with tracer gas, at the right time and with the right pressure. The stand-alone Tracer Gas Filler TGF11 provides a proven quick-start solution and lowers process costs by optimizing and accelerating the entire gas filling process.

The instrument independently fills tracer gas into the test parts and controls the filling pressure. After the leak test, it also evacuates the tracer gas to avoid false leak indications due to tracer gas contamination in the work area. Additionally, the TGF11 Tracer Gas Filler features a gross leak abort function, minimizing contamination of test area.



ADVANTAGES AT A GLANCE

- Gets tracer gas filling controlled
- Operates together with any leak detector (stand alone)
- Handles both helium and hydrogen (forming gas, 5% hydrogen in nitrogen) tracer gas
- Available in both low pressure and standard versions
- Eliminates air pockets thanks to pre-evacuation of air
- Shortens test cycles due to the high filling speed
- Controls test pressure during the entire test
- Fills small fragile objects at low pressures
- Avoids tracer gas contamination at the workplace
- Gets the process started faster with all functions proved and tested
- Alerts operator before tracer gas supply is too low

HELIUM AND HYDROGEN TRACER GAS HANDLING

The Tracer Gas Filler TGF11 can fill both helium and forming gas (hydrogen-nitrogen mixture) as tracer gases. In combination with the INFICON leak detectors, such as the Sensistor Sentrac® Hydrogen Leak Detector, or the Protec® P3000 Helium Leak Detector, it provides a high-performance system for demanding leak testing applications.



INTEGRATION AND CUSTOMIZATION

24V I/O ports allow for remote control and status information in customized leak detection systems.

LOW COST OF MAINTENANCE

INFICON TGF11 utilizes a cost-effective Venturi pump with no moving parts, thus optimizing evacuation and reducing maintenance costs.

ADAPTABLE FILLING OPTIONS

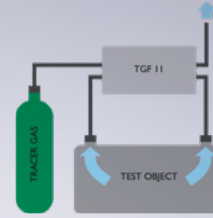
The filling sequence can be adapted to the test object. Choose between single or double feeding thanks to two test ports.

WELL SUITED FOR INDUSTRIAL PRODUCTION

Dual ports for filling and evacuation in combination with a high performing proportional valve allow for short cycle times.

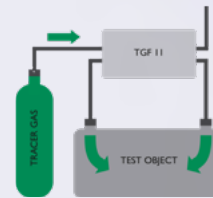


HOW IT WORKS



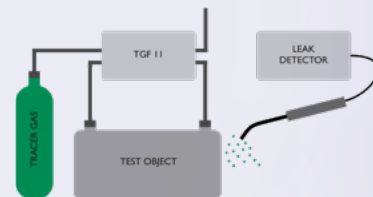
1- PRE-EVACUATE

With the TGF11 connected to the test object, the test procedure starts by a pre-evacuation, in order to facilitate the tracer gas filling. Pre-evacuation is in many cases necessary to ensure that tracer gas reaches all parts of the test object.



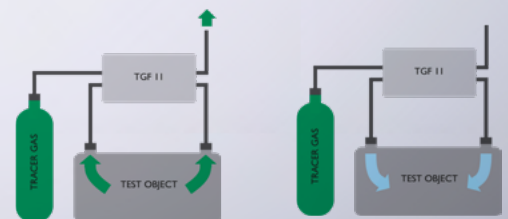
2- FILL TRACER GAS

The test object is filled with tracer gas to a specified pressure and maintains this pressure. If the pressure is too low indicating a gross leak, the unit aborts the tracer gas filling.



3- LEAK DETECTION

Once tracer gas filling is complete, the TGF11 waits for the leak test to be performed. Meanwhile, it monitors the gas pressure and adjusts it to the specified value.



4- EVACUATE TRACER GAS AND REFILL

When the leak testing is complete, the tracer gas is evacuated via the exhaust port and the test object is refilled with air or nitrogen to atmospheric pressure.

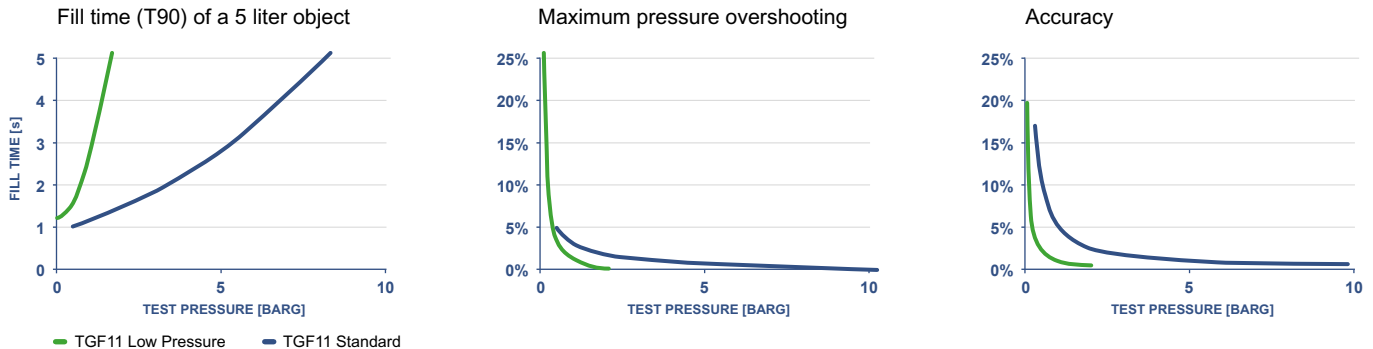
SPECIFICATIONS*

Test pressure	
Standard version	0.3–10 barg (4.4–145 PSIG)
Low pressure version	0.05–2 barg (0.7–29 PSIG)
Supplies	
Connections	Push in fittings, OD 6, 10, 12 mm
Tracer gas pressure supply (standard version)	1–11 barg** (14.5–159.5 PSIG)
Tracer gas pressure supply (low pressure version)	1–4 barg** (14.5–58 PSIG)
Capacity***	
Evacuation time	0.8 s/l to -0.5 barg (-7.2 PSIG) 1.6 s/l to -0.7 barg (-10.1 PSIG) 2.5 s/l to -0.8 barg (-11.6 PSIG)
Maximum vacuum	-0.85 barg (-12.3 PSIG) (85% vacuum)
Communication interface	•USB device •RS232 •PLC Input/Output •Operator interface
Ambient temperature range	5° – 45°C (41° – 113°F)
Dimensions (W x H x D)	305 x 160 x 284 mm (12 x 6.2 x 11.1 in.)
Weight	9.5 kg (19.8 lb.)

* All pressure specifications given relative to atmosphere (denoted by “g” for gauge)

** At least 1 barg above tracer gas test pressure

*** The capacity depends on the connection to the test object



ORDERING INFORMATION

PRODUCT	CATALOG NUMBER
TGF11 Tracer Gas Filler, including mains cord and USB cable	
Standard version	590-558
Low pressure version	590-559
SPARE PARTS	
Fuse 2A (minimum quantity 10 pcs)	591-578
Blanking plug (minimum quantity 10 pcs)	
6 mm (0.2 in.)	591-961
10 mm (0.4 in.)	591-962



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Due to our continuing program of product improvements, specifications are subject to change without notice.
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