



E-PDQ

Compact Micro-Flow air leak test instrument:
testing in pressure and vacuum conditions



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The E-PDQ is designed for the quick production leak testing of small components and ensures that products meet their leak tightness requirements. Its compact design makes the E-PDQ perfectly suitable for system integration. It is available as EQ version for pressure applications and as MQ version for vacuum applications.

Customer benefits

- Compact design – easy integration
- Integrated pressure (respectively vacuum) reservoir – simple test setup
- Cost-efficient – fast return on investment

Solution example



Multi-stations leak and flow test system
for the life science industry



Medical devices



Electronics



Valves

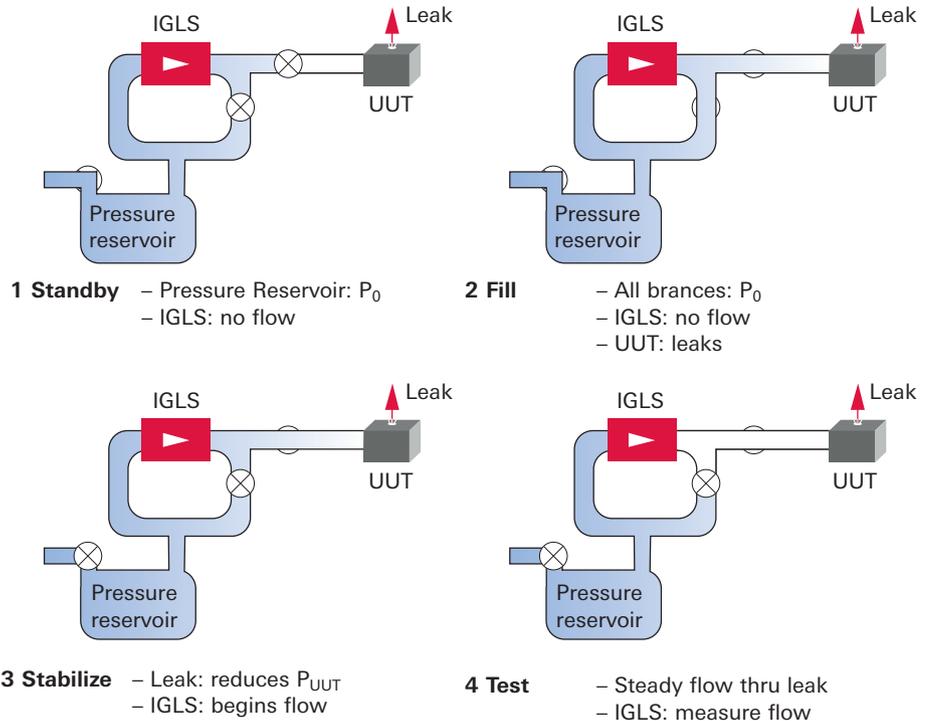


Customer benefits

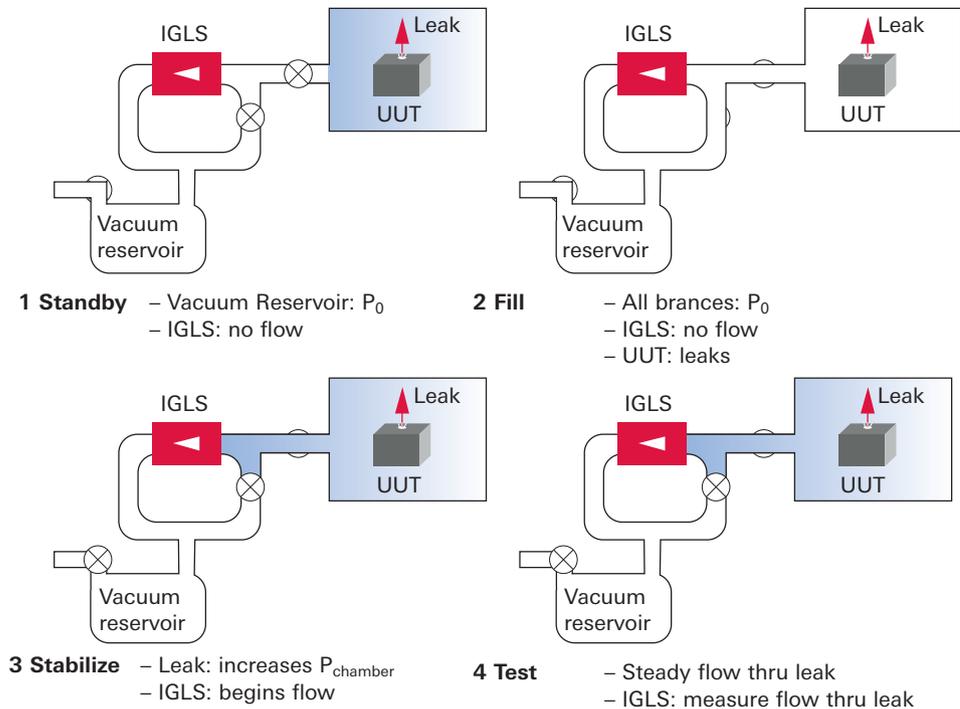
- Compact design for small footprint
- Rack-mounted design for testing multiple cavities simultaneously with the same machine
- Version EQ for Micro-Flow pressure testing
- Version MQ for Micro-Flow testing under vacuum
- Automated test circuit with valves and sequence controller
- Digital and analog I/O interface via Ethernet or serial port
- Easy-to-read LED that indicates test status: test, pass or fail

Leak detection methods

Air leak testing with Micro-Flow sensor at pressure conditions



Air leak testing with Micro-Flow sensor at vacuum conditions



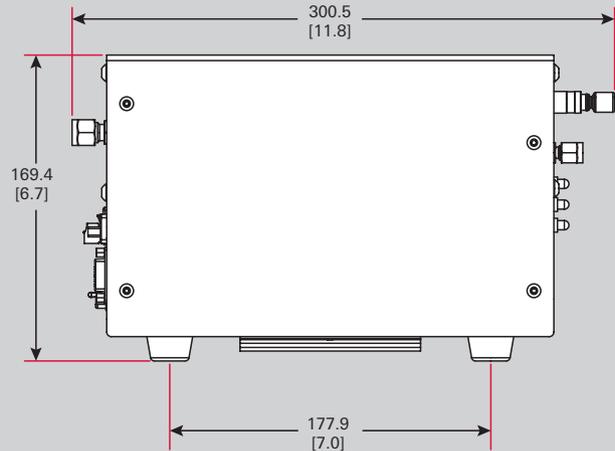
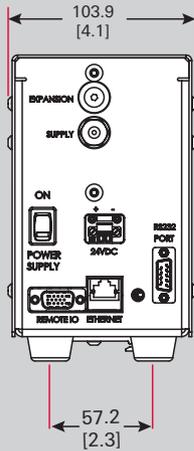
IGLS = Intelligent Gas Leak Sensor

E-PDQ

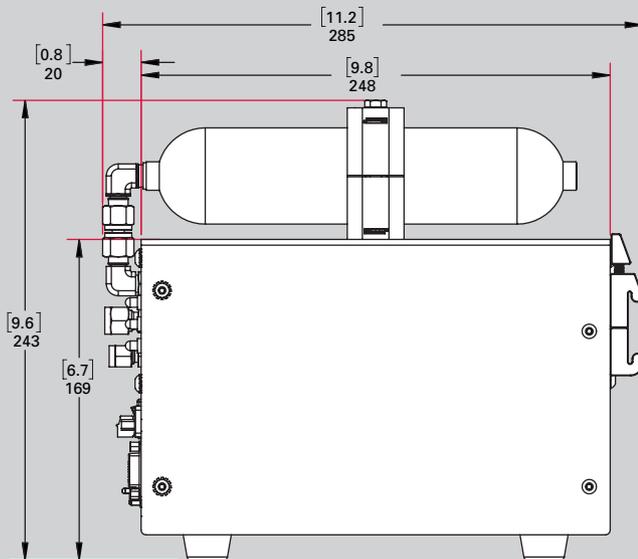
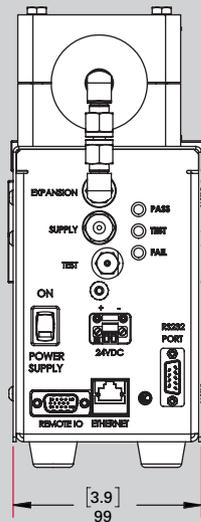
Dimensions

Dimensions

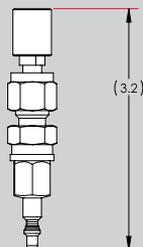
E-PDQ Standard



E-PDQ DIN Rail back mount with 300 ccm additional tank



E-PDQ Verification Quick Disconnect Body type: BP



Dimensions in mm
[XX] Dimensions in inch

Technical data, accessories and order number matrix

Technical data¹⁾

	EQ	E-PDQ	MQ
Applicable Micro-Flow sensors		IL2-M, IL2-KM	
Leak rates / sensitivity		0.03 cc/min and higher	
Pressure ranges	> 14.5 psia / 1 bar abs. to 65 psia / ≈ 4.5 bar abs.		2 psia / 0.138 bar abs. to 14.5 psia / 1 bar abs.
Dimensions		4" W x 6.25" H x 10" D / 102 x 159 x 254 mm (does not include connections and fittings)	
Gases		Dry, clean gases: air, nitrogen (further gases detectable)	
Pneumatic connections		Test port 1/8 inch Swagelok®, air/vacuum supply 1/4 inch Swagelok®	
Digital inputs		5-30 VDC, Opto-Isolated for start, stop, test type, remote pressure switch	
Digital outputs		5-30 VDC, Opto-isolated for pass, fail, test type, test on, clamp, custom output	
Analog outputs		Single channel, 0-5 VDC pressure control	
Power supply		24 VDC (maximum current is 2 amp)	
Interfaces		RJ-45 Ethernet, or RS-232 Serial Interface	

¹⁾ Specific technical specification depends on the sensor used. We are happy to support you in selecting the perfect configuration for your application.

Accessories

	E-PDQ
LeakTek™	■
Adaptive Test™ utility tools	■
Leak Rx™	■
Expansion tank: small/medium	■
Expansion tank: large	
Precision pressure regulator: small/medium volume	■
Verification orifice: ECD or SE (ECD-X-PSE-X-P)	■
Verification orifice: ECS air calibration	■
Glass orifice: calibrated at barometric inlet, vacuum outlet on primary std.	■
Remote exhaust valve with filter	■
Oil-free vacuum generation and control package (ca. 0.3–0.8 bar abs.)	■
Oil-free vacuum generation and control package (ca. 0.07–0.15 bar abs.)	■
Shallow vacuum generation and control package	■
Remote pendant with Start/Stop button	■
Mass Extraction UUT filter	■
Quick connector with plug	■

**Order number matrix
E-PDQ**

Version	ab
EQ – pressure applications	EQ
MQ – vacuum applications	MQ

Full scale flow (cc/min)	cdefg
0.5 cc/min	0500M
1 cc/min	1000M
3 cc/min	3000M
5 cc/min	5000M
10 cc/min	010KM
25 cc/min	025KM
50 cc/min	050KM
100 cc/min	100KM
250 cc/min	250KM

Operating pressure (Psia / bar)	hi
15 Psia / \approx 1 bar abs. (MQ – vacuum applications)	15
30 Psia / \approx 2 bar abs. (EQ – pressure applications)	30
65 Psia / \approx 4.5 bar abs. (EQ – pressure applications)	65

Mounting configuration (both options include rubber bumper feet)	j
Bottom mount DIN rail	B
Back mount DIN rail	D

Additional 300 ccm expansion tank	k
300 ccm tank mounted to top cover	T
No additional tank (standard configuration)	(Blank)

Order number

abcde fghijk



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