

“UNPARALLELED PERFORMANCE AND SAFETY UNDER PRESSURE!”®

TestMaster®



Side View



Port View



Front View

Model MPG Series

Medium Pressure Gas Test Tools

- Pressures up to 20,000 psi (1,379 bar)
- 0.13 in. to 3.00 in. OD (3.2 mm to 76.2 mm OD)
- Collet grip and seal on tube OD
- Manual lever grip release
- Pressure-compensated grip

DESCRIPTION

The patented TestMaster® Model MPG Series Medium Pressure Gas Test Tool is specially designed to grip and provide positive sealing for plain end-tubing. The safety pre-grip of the clamping mechanisms assures a constant, positive grip during any work or operation cycle. The tool can be used with a variety of gases including helium, nitrogen, and hydrogen.

This precision-machined tool provides versatility for use in pressure testing applications. The compact, balanced design is particularly suited to restricted areas, such as aircraft hydraulic and fuel line locations, or residential and commercial heating and cooling systems.

The Model MPG Series Tool handles standard and metric tube, pipe, and fitting sizes from 0.13 in. (3.2 mm) to 3.00 in. (76.2 mm) in diameter. Special tube sizes and tool configurations will be considered upon request.

OPERATION

Connect the Model MPG Tool to the pressure line. Attach the tool to the tube by pressing the handle to retract collets. Push the tube into the tool until pressed against the tube stop. This instantly provides a complete seal. When the tool's handle is released, the collets are engaged and ready for safe operation. Next, apply test pressure to desired level, **but do not exceed maximum operating pressure**. To disconnect after operation cycles, press handle to release collets and pull to remove tool.

APPLICATION

The TestMaster® Model MPG Series Medium Pressure Gas Tool is a snap-on tool using gas for pressure testing, air underwater testing, and cleaning applications with working pressures up to 20,000 psi (1,379 bar). Additionally, they can be used for production testing of tubes, tube assemblies, and systems. This tool conforms to military, nuclear, automotive, and aerospace testing specifications such as API, ASTM, ASME, ISO, DIN, and BS.

MATERIALS

Wetted Parts: Heat-treated, stainless steel

TOOL CONFIGURATION

Collet Grip and Seal: On tube OD

Gripping: Normally-closed
Manual lever grip release
Pressure-compensated spring grip

OPERATING CONDITIONS

Maximum Pressure: 20,000 psi (1,379 bar)
Temperature: -20° F to 160° F (-29° C to 71° C)
Services: Helium, nitrogen, and hydrogen
Tube OD Range: 0.13 in. to 3.00 in. (3.2 mm to 76.2 mm)
OD Tolerance: Standard tube tolerances

MAXIMUM PRESSURE
20,000 psi
1,379 bar

TestMaster®

Model MPG Series

Medium Pressure Gas Test Tools

Model MPG Series Tool Specifications

Tube OD Range				Overall Length		Body Diameter		Minimum Orifice		Minimum Tube Swallow		Standard 37° Flare Port
Inches*		MM*										
Min.	Max.	Min.	Max.	Inches	MM	Inches	MM	Inches	MM	Inches	MM	
0.13	0.50	3.2	12.7	4.25	108.0	1.25	31.8	0.19	4.8	0.82	20.9	3/8 Male
0.50	1.00	12.7	25.4	4.37	110.9	1.75	44.5	0.30	7.5	0.81	20.6	3/8 Male
1.00	1.50	25.4	38.1	4.57	116.1	2.38	60.3	0.39	9.9	1.06	27.0	1/2 Male
1.50	2.00	38.1	50.8	5.08	129.0	3.13	79.4	0.61	15.5	1.12	28.4	3/4 Male
2.00	3.00	50.8	76.2	5.69	144.5	4.13	104.8	0.61	15.5	1.35	34.3	3/4 Male

* Note: Tools are designed for a dedicated tube diameter and do not cover the entire diameter range noted at each size.
A single tube OD must be specified for the collet set.

Special Configurations Available Upon Request

FEATURES

- Full-flow, high pre fill rate
- Predetermined internal tube stops requires no measuring
- Low marking collet design
- Special collet design locking principle
- Lever collet release for fast tool removal
- Pressure-compensated design
- Built-in tube end tolerances require no square cut ends
- Compact, balance design
- Precision-machined from heat-treated stainless steel
- Designed for test applications
- Engineered to contain pressure

BENEFITS

- Decreases cycle time
- Ensures proper tube depth engagement
- Prevents tube end collapse and eliminates scrap
- Accommodates shorter length tube or pipe
- Increases production throughput
- Contains all high-pressure loads for safe operation
- Efficient operation saves time
- Ease of use in limited space applications
- Provides long, trouble-free service
- Tools can be used with different test media
- No other fixtures are needed



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