

PFM6 Digital Portable Hydraulic Tester

Simultaneously Measures Flow, Pressure and Temperature



- Five flow ranges
- Large 3-1/2 digit LCD for flow and temperature
- Helical tube pressure gauge
- One toggle switch to control power and select flow and temperature
- Loading valve with fingertip control of pressure
- Platinum resistance temperature sensor
- Pressure surge protection with internal pressure relief
- Turbine flow sensor provides fast response
- Available with SAE or BSPP ports
- Pressures up to 6000 PSI (414 Bar)
- Temperatures up to 300 °F (150 °C)
- Flow accuracy $\pm 1\%$ of full scale
- Repeatability $\pm 0.2\%$

The PFM6 Series is a compact, lightweight portable tester designed for fast diagnostic troubleshooting of all types of mobile or stationary hydraulic systems and components. These self-contained testers feature laboratory accuracy and provide flow, pressure and temperature measurements simultaneously from one point.

Simple operation includes a toggle switch to display either flow or temperature readings and a loading valve that operates with fingertip control. The dual scale helical tube pressure gauge offers pulsation dampening and high overpressure capacity. For safe operation, all testers include an internal pressure relief system.

SPECIFICATIONS

Performance

| | |
|----------------------------|---|
| Flow Accuracy: | $\pm 1\%$ of full scale |
| Repeatability: | $\pm 0.2\%$ |
| Turbine Response: | $\leq 200\text{ms}$ |
| Temperature: | |
| Fluid | -4 to +300 °F (-20 to +150 °C) |
| Ambient | -4 to +131 °F (-20 to +55 °C) |
| Flow Readout: | Linearity and zero shift ± 1 digit |
| Operating Pressure: | up to 6000 PSI (414 Bar, 41.4 MPa, 420 kg/cm ²) |
| Pressure Drop: | See ΔP charts on page 14 |
| Readout Accuracy: | ± 1 digit |

Material

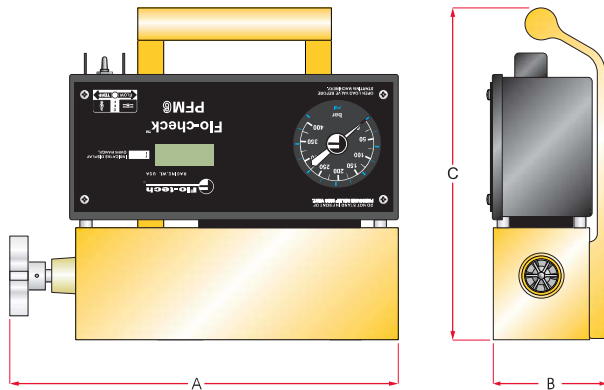
| | |
|-------------------------------------|--|
| Housing: | 6013-T651 Aluminum; anodized |
| Turbine Rotor: | T416 Stainless steel |
| Ball Bearings: | 440C Stainless steel |
| Rotor Shaft: | T303 Stainless steel |
| Rotor Supports: | |
| PFM6-15/30 | CA360 Brass |
| PFM6-60/85/200 | 6061-T6 Aluminum alloy |
| Hub Cones: | 6061-T6 Aluminum alloy |
| Valve Body: | |
| PFM6-15/30 | Cold rolled steel; zinc plate, dichromate finish |
| PFM6-60/85/200 | 12L14 Steel; zinc plate, dichromate finish |
| Valve Stem: | T303 Stainless steel |
| Poppet: | 12L14 Steel; hardened |
| Sleeve: | |
| PFM6-200 only | D.O.M. steel tube |
| Temperature Probe: | T303 Stainless steel |
| Magnetic Pick-up: | |
| Body | T303 Stainless Steel |
| Nut | T303 Stainless Steel |
| Seals: | Buna N standard; Viton® and EPR optional |
| Carrying Handle: | Cast aluminum; anodized |
| Electronic Case & Cover: | Cold rolled steel; zinc plate with clear seal, epoxy black paint |
| Battery: | 4 AA size alkaline, ~ 50 hours of service |

| | |
|---------------|---|
| Ports: | SAE Straight thread O-ring boss, female J1926/1; ISO1179 (BSPP) |
|---------------|---|

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DIMENSIONS



| SERIES | A LENGTH IN (mm) | B DEPTH IN (mm) | C HEIGHT IN (mm) | WEIGHT LBS (KG) |
|----------|------------------------|-----------------------|------------------------|--------------------|
| PFM6-15 | 11.3 (287) | 3.6 (92) | 10.3 (262) | 13.85 (6.3) |
| PFM6-30 | 11.3 (287) | 3.6 (92) | 10.3 (262) | 13.85 (6.3) |
| PFM6-60 | 11.5 (292) | 3.6 (92) | 10.3 (262) | 16.50 (7.5) |
| PFM6-85 | 11.5 (292) | 3.6 (92) | 10.3 (262) | 16.50 (7.5) |
| PFM6-200 | 12.3 (311) | 4.1 (105) | 10.8 (275) | 20.00 (9.1) |

ORDERING INFORMATION

| SERIES | NOMINAL PORT SIZE | FLOW RANGE | MODEL NUMBER | STD or CE MODEL | PRESSURE GAUGE UNITS OF MEASURE |
|----------|----------------------|-----------------|-----------------|---|------------------------------------|
| PFM6-15 | SAE 12 | 1 - 15 GPM | F5080 * - XXX | Leave blank for standard model or CE for CE option | PSI BAR MPA KG/CM2 |
| PFM6-30 | SAE 12 | 2 - 30 GPM | F5079 * - XXX | | |
| PFM6-60 | SAE 16 | 3 - 60 GPM | F5078 * - XXX | | |
| PFM6-85 | SAE 16 | 4 - 85 GPM | F5077 * - XXX | | |
| PFM6-200 | SAE 24 | 7 - 199.9 GPM | F5076 * - XXX | | |
| PFM6-15 | G 3/4 | 4 - 56 LPM | F5110 * - XXX | | |
| PFM6-30 | G 3/4 | 7.5 - 113.6 LPM | F5111 * - XXX | | |
| PFM6-60 | G 1 | 12 - 227 LPM | F5112 * - XXX | | |
| PFM6-85 | G 1 | 15 - 321 LPM | F5113 * - XXX | | |
| PFM6-200 | G 1-1/2 | 26 - 757 LPM | F5114 * - XXX | | |

Examples:

F5076-PSI = PFM6-200
SAE 24 ports
7 - 199.9 GPM flow range
Standard model
PSI pressure units

F5111CE-BAR = PFM6-30
G 3/4 ports
7.5 - 113.6 LPM flow range
CE certified
Bar pressure units

ACCESSORIES

| MODEL NUMBER | DESCRIPTION | SERIES |
|-----------------|---|-------------------|
| F4934-1530 | Carrying Case | PFM6-15 & PFM6-30 |
| F4934-6085 | Carrying Case | PFM6-60 & PFM6-85 |
| F4934-200 | Carrying Case | PFM6-200 |
| F1614-7500 | Pressure Relief Disc, 7500 PSI (1 per Tester) | All PFM6s |
| F001109 | 5-Point Calibration Certificate ¹ | All PFM6s |
| F001110 | 10-Point Calibration Certificate ¹ | All PFM6s |

¹ Certificates are traceable to NIST, ISO 9001.