

# 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
- 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 pressure surge protection.

## SPECIFICATIONS

### Performance

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

### Material

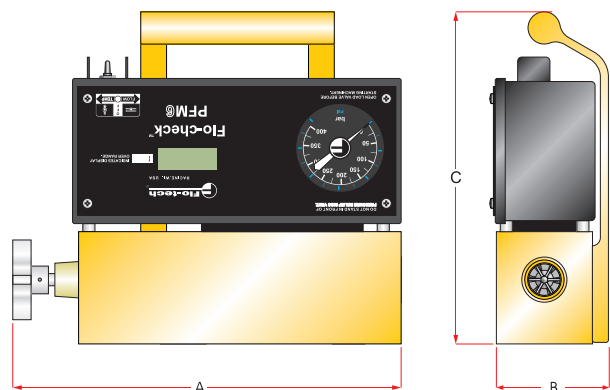
<b>Housing:</b>	6013-T651 Aluminum; anodized
<b>Turbine Rotor:</b>	T416 Stainless steel
<b>Ball Bearings:</b>	440C Stainless steel
<b>Rotor Shaft:</b>	T303 Stainless steel
<b>Rotor Supports:</b>	
PFM6-15/30	CA360 Brass
PFM6-60/85/200	6061-T6 Aluminum alloy
<b>Hub Cones:</b>	6061-T6 Aluminum alloy
<b>Valve Body:</b>	
PFM6-15/30	Cold rolled steel; zinc plate, dichromate finish
PFM6-60/85/200	12L14 Steel; zinc plate, dichromate finish
<b>Valve Stem:</b>	T303 Stainless steel
<b>Poppet:</b>	12L14 Steel; hardened
<b>Sleeve:</b>	
PFM6-200 only	D.O.M. steel tube
<b>Temperature Probe:</b>	T303 Stainless steel
<b>Magnetic Pick-up:</b>	
Body	12L14 Steel; electroless nickel plate
Nut	12L14 Steel; electroless nickel plate
<b>Seals:</b>	Buna N standard; Viton® and EPR optional
<b>Carrying Handle:</b>	Cast aluminum; anodized
<b>Electronic Case &amp; Cover:</b>	Cold rolled steel; zinc plate with clear seal, epoxy black paint
<b>Battery:</b>	4 AA size alkaline, ~ 50 hours of service
<b>Ports:</b>	SAE Straight thread O-ring boss, female J1926/1; ISO1179 (BSPP)

Viton is a registered trademark of DuPont Dow Elastomers.

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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)	3.5 (89)	9.8 (249)	13.85 (6.3)
PFM6-30	11.3 (287)	3.5 (89)	9.8 (249)	13.85 (6.3)
PFM6-60	11.5 (292)	3.5 (89)	9.8 (249)	16.50 (7.5)
PFM6-85	11.5 (292)	3.5 (89)	9.8 (249)	16.50 (7.5)
PFM6-200	12.3 (311)	4.0 (101)	10.3 (262)	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 <sup>1</sup>	All PFM6s
F001110	10-Point Calibration Certificate <sup>1</sup>	All PFM6s

<sup>1</sup> Certificates are traceable to NIST, ISO 9001.