

AquaFlow Pro Series

High-Efficiency Centrifugal Pump

The AquaFlow Pro Series AF-2500 is a premium centrifugal pump designed for industrial and commercial water transfer applications. Engineered with precision-cast impellers and robust construction, this pump delivers reliable performance in demanding environments. Ideal for HVAC systems, water distribution, irrigation, and general industrial processes.

Model Information

Model Number:	AF-2500-HE
Series:	AquaFlow Pro Series
Type:	Horizontal Centrifugal Pump
Product Code:	AFP-2500-230V-3PH

Technical Specifications

Performance Parameters	
Flow Rate (Max)	250 GPM (950 LPM)
Head (Max)	120 feet (36.5 meters)
Suction Lift	25 feet (7.6 meters)
Operating Pressure	Up to 75 PSI
Motor Specifications	
Motor Power	5 HP (3.7 kW)
Voltage/Phase	230V/460V, 3-Phase
Frequency	60 Hz
RPM	3500

Efficiency Class	IE3 (Premium Efficiency)
Physical Specifications	
Inlet/Outlet Size	3" / 2.5" (80mm / 65mm)
Connection Type	Flanged ANSI 150
Impeller Diameter	8.5 inches (216 mm)
Number of Stages	Single Stage
Shaft Seal Type	Mechanical Seal - Silicon Carbide

Construction & Materials

Component	Material	Standard
Pump Casing	Cast Iron ASTM A48 Class 30	EN-GJL-250
Impeller	Bronze / Stainless Steel 316	ASTM B584 / SS316
Shaft	Stainless Steel 416	ASTM A582
Mechanical Seal	Silicon Carbide / Carbon	DIN 24960
Bearings	Heavy-Duty Ball Bearings	SKF 6308
O-Rings	Nitrile (NBR)	ISO 3601
Fasteners	Stainless Steel 304	DIN 931

Operating Conditions

Liquid Temperature Range	-10°C to +120°C (14°F to 248°F)
Ambient Temperature	-20°C to +40°C
Maximum Working Pressure	10 bar (145 PSI)
pH Range	6.5 - 8.5
Viscosity (Max)	200 cSt
Solids Content (Max)	50 mg/L
Protection Class	IP55
Insulation Class	Class F

Dimensions & Weight

Overall Length	620 mm (24.4 inches)
Overall Width	290 mm (11.4 inches)
Overall Height	385 mm (15.2 inches)
Footprint	450 x 250 mm
Net Weight	68 kg (150 lbs)
Shipping Weight	78 kg (172 lbs)

Mounting Bolt Pattern	350 x 200 mm
Center of Gravity Height	195 mm from base

Key Features & Benefits

- **High Efficiency:** IE3 premium efficiency motor reduces energy consumption by up to 20%
- **Durable Construction:** Cast iron casing and bronze/SS316 impeller for long service life
- **Low Maintenance:** Easy-access mechanical seal and replaceable wear parts
- **Quiet Operation:** Precision-balanced impeller for vibration-free operation (≤ 65 dB)
- **Reliable Sealing:** Premium silicon carbide mechanical seal prevents leakage
- **Versatile Installation:** Horizontal mounting with multiple port orientations
- **Thermal Protection:** Built-in motor overload protection
- **Easy Service:** Back pull-out design for maintenance without disconnecting piping
- **Corrosion Resistant:** Epoxy-coated exterior for harsh environments
- **Wide Application Range:** Suitable for clean and slightly contaminated water

Typical Applications

- **HVAC Systems:** Heating and cooling water circulation
- **Water Distribution:** Municipal and industrial water supply
- **Irrigation:** Agricultural and landscape irrigation systems
- **Industrial Processes:** General industrial water transfer
- **Pressure Boosting:** Building water pressure systems
- **Fire Protection:** Fire sprinkler system supply (when configured)
- **Washing Systems:** Car wash and equipment cleaning systems
- **Water Treatment:** Filtration and treatment plant operations

Standards & Certifications

Design Standard	ISO 5199, ISO 2858
Electrical Safety	IEC 60034, UL 1004
Quality Management	ISO 9001:2015 Certified
Environmental	RoHS Compliant
Pressure Equipment	PED 2014/68/EU
Motor Efficiency	IE3 per IEC 60034-30-1

Warranty & Support

Standard Warranty: 24 months from date of purchase
Extended Warranty: Available for up to 60 months
Technical Support: 24/7 phone and email support
Spare Parts: Guaranteed availability for 10+ years
Service Network: Authorized service centers worldwide

Ordering Information

Standard Package Includes:

- AquaFlow Pro AF-2500 Pump Assembly
- Motor with mounting bracket
- Mechanical seal (installed)
- Installation and operation manual
- Warranty certificate
- Performance curve chart

Optional Accessories:

- Vibration damping pads
- Pressure gauges (inlet/outlet)
- Flow meter
- Variable frequency drive (VFD)
- Sound enclosure
- Extended warranty package

Document Information

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Contact Information

AquaFlow Industries | 1234 Industrial Parkway, Suite 500 | Charlotte, NC 28269, USA
Phone: +1 (555) 123-4567 | Email: sales@aquafloindustries.com | Web: www.aquafloindustries.com

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