MODEL MVP-6CFM

The most valuable pump for solvent extraction processing.

FEATURES & BENEFITS:

Certified system gas recovery pump
Positive displacement LP-Gas extraction pump
Electric powered double diaphragm gas compressor
Designed especially for LP-Gas vapor recovery
Will also pull deep vacuum in chambers
Ideal for butane and butane/propane mix vapor recovery processes
Recovers 100% propane vapor when used with recovery tank cooling
Can pull vacuum back through the pump when evacuating a system
Passes liquid condensation without damage
Explosion-proof motor rated for C1D1 areas
Three-phase and single-phase models available
Continuous 100% duty cycle – run 24/7
No air compressor needed
Patented pump drive technology
No rotating or moving seals
Can run dry without damage
Can stall under pressure without damage
Can start against full load and pressure
No driving air used; cannot leak air into the system
Maximum pumping pressure output is adjustable
No lubrication in the pump heads; no contamination of product
Meets NFPA 58 requirements for LP-Gas – rated LPG 350 PSI
Compliant with NFPA and UL standards for C1D1 motors and LPG vapor recovery
Meets Class 1 Division 1 hazardous area facility requirements (when installed correctly)
Three-phase motors compatible with VFD (variable frequency drive) for speed control of pumping
Easy DIY diaphragm replacement or internal cleaning when needed
Simple DIY stainless steel reed valve replacement if ever needed
One year manufacturer’s warranty (see Operation Manual)

Made in the USA

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**PERFORMANCE FACTOIDS:**

- Recover LP-Gas vapor at **OVER 6 CFM** (cubic feet per minute)
- Recover butane at up to **1 LB/MIN** (pounds per minute)
- Recover and recondense butane at **OVER 12 GPH** (gallons per hour)
- Maximum pumping outlet pressure: **60 PSI** (4.1 bar) continuous; **70 PSI** (4.8 bar) intermittent
- Maximum pumping inlet vacuum produced: **27 InHg** (0.91 bar)
- Maximum pumping speed: **190 CPM** (cycles per minute)
- Pump static withstand pressure rating: **MAWP 350 PSI** (24 bar)
- Materials: pressure section: stainless steel; diaphragms: **FKM**; reed valves: stainless steel
- Optional PTFE diaphragms kit available
- Process gas temperature range: **FKM -40°F - 275°F (-40°C - 135°C); PTFE +40°F - 220°F (4°C - 104°C)**
- Recommended FKM replacement schedule: every 1000 hours running time
- Air temperature range for motor/gearbox operation: **32°F - 104°F (0°C - 40°C)**

**PUMP HEAD CHARGE:**

- Motor is coupled to diaphragms with patented gas pressure charged chamber
- Pumping outlet pressure runs about 10 PSI lower than the charge gas pressure level
- Non-reactive CO₂ gas is used to charge the pump head
- CO₂ gas is safer than air for driving the pumping
- CO₂ gas is non-flammable and non-explosive with LPG (should a diaphragm ever leak)
- CO₂ gas regulator with gauges is provided with pump assembly
- CO₂ tank is operator provided (cannot ship filled tanks) – from any welding supply shop
- Pump charge gas supply: standard (#20) 5 LB tank of industrial CO₂
- Typical CO₂ gas usage: <0.2 SCFH (very little); estimated life of charge gas tank: 1 year
- Pump charge gas pressure range: continuous 5 to 70 PSI (1.4 to 5.5 bar); to 80 PSI intermittent

**ELECTRICAL & MECHANICAL:**

- Electric motor: explosion proof for C1D1 hazardous areas; rated **Class I Gr C & D, Class II Gr F&G**
- Electric motor: **1 HP, 1800 RPM, 60 HZ**
- Motor option: Model MVP-6CFM-1PH: **Single-phase: 115/208-230V, 13.4/6.7 FLA** (full load amps)
- Pump speed: **190 CPM** (cycles per minute) at 60 HZ
- Noise: sound pressure measured 1 meter from pump: 80.5 dBa
- Porting: process inlet and outlet: **1/2” JIC-male**
- Added ports for optional pressure gauges: inlet and outlet: 1/4” FNPT
- Inlet & outlet ports at ideal equipment connection heights 46” and 41” above floor
- Size: **17.0” x 19.9” base x 46” tall**; minimum use of valuable floor space
- Weight: 182.5 lb (82.8 kg)